

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

Facility ID No.: 0470002

Hamilton County

Title V Air Operation Permit Revision

Permit No. 0470002-1379-AV

(~~2nd~~3rd) Revision of Title V Air Operation Permit No. 0470002-130-AV)



Permitting Authority:

State of Florida
Department of Environmental Protection
Division of Air Resource Management
Office of Permitting and Compliance
2600 Blair Stone Road
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Tallahassee, Florida 32399-2400
Telephone: 850/717-9000
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Compliance Authority:

State of Florida
Department of Environmental Protection, Northeast District
8800 Baymeadows Way West, Suite 100
Jacksonville, Florida 32256
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Title V Air Operation Permit Revision

Permit No. 0470002-1372-AV

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Appendix NESHAP 40 CFR 61, Subpart R - National Emission Standards for Hazardous Air Pollutants (NESHAP) for Radon Emissions from Phosphogypsum Stacks (Version Dated 10/17/2000).

Appendix NESHAP 40 CFR 63, Subpart A - MACT General Provisions (Version Dated 11/19/2020).

Appendix NESHAP 40 CFR 63, Subpart AA - National Emission Standards for Hazardous Air Pollutants (NESHAP) for Phosphoric Acid Plants (Version Dated 11/19/2020).

Appendix NESHAP 40 CFR 63, Subpart BB - National Emission Standards for Hazardous Air Pollutants (NESHAP) for Phosphate Fertilizer Production Plants (Version Dated 11/03/2020).

Appendix NESHAP 40 CFR 63, Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (RICE) (Version Dated 11/19/2019).

Appendix NESHAP 40 CFR 63, Subpart DDDDD - National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters (Version Dated 11/20/2015).

Appendix NSPS 40 CFR 60, Subpart A - General Provisions (Version Dated 10/07/2020).

Appendix NSPS 40 CFR 60, Subpart Db - Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units (Version Dated 02/16/2012).

Appendix NSPS 40 CFR 60, Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units (Version Dated 02/16/2012).

Appendix NSPS 40 CFR 60, Subpart H - Standards of Performance for Sulfuric Acid Plants (Version Dated 02/27/2014).

Appendix NSPS 40 CFR 60, Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (Version Dated 11/13/2019).

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Appendix A, Abbreviations, Acronyms, Citations and Identification Numbers (Version Dated 05/09/2011).

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Appendix SO₂, CEMS Plan for SO₂ Emissions (EUs 066 and 067).

Appendix TR, Facility-wide Testing Requirements (Version Dated 05/21/2019).

Appendix TV, Title V General Conditions (Version Dated 02/16/2012).

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

Appendix 40 CFR 90.103.

Appendix NESHAP 40 CFR 63.602(d) - Standards and Compliance, Gypsum Dewatering Stack and Cooling Pond Management Plan dated 07/27/2021.

Referenced Attachments. At End of Appendices Document

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

Attachment B, ASP Request 15-T-AP - Alternate Monitoring Plan to that Required by 40 CFR 63 Subparts AA and BB.

Attachment C, Simultaneous Testing of F and PM - Interoffice Memorandum.

Attachment D, Alternative Standards or Procedures Order No. ASP-95-H-01.

Table H, Permit History.



FLORIDA DEPARTMENT OF Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Ron DeSantis
Governor

Jeanette Nuñez
Lt. Governor

Alexis A. Lambert
Secretary

PERMITTEE:

White Springs Agricultural Chemicals, Inc.
15843 SE 78th Street
White Springs, Florida 32096

Permit No. 0470002-1372-AV
Suwannee River/Swift Creek Complex
Facility ID No. 0470002
Title V Air Operation Permit Revision

The purpose of this permit is to revise the Title V air operation permit for the above referenced facility. The existing Suwannee River/Swift Creek Complex is located in Hamilton County at 15843 SE 78th Street, White Springs, Florida. UTM Coordinates are: Zone 17, 328.3 km East and 3368.8 km North; and, Latitude: 30° 26' 27" North and Longitude: 82° 47' 16" 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 and 62-213. The above named permittee is hereby authorized to operate the facility in accordance with the terms and conditions of this permit.

Executed in Tallahassee, Florida.

0470002-139-AV Effective Date: [ARMS Day 46]

0470002-137-AV Effective Date: [November 2, 2023]

0470002-133-AV Effective Date: September 27, 2022

0470002-130-AV Effective Date: November 17, 2021

Renewal Application Due Date: April 6, 2026

Expiration Date: November 17, 2026

(Proposed)

David Lyle Read, P.E., Environmental Administrator SES
Permit Review Section
Division of Air Resource Management

DLR/sms

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SECTION I. FACILITY INFORMATION.

Subsection A. Facility Description.

This existing facility processes phosphate rock to produce several products at the Suwannee River/Swift Creek Complex (two plants). The facility consists of one phosphoric acid plant, one monocal/dical process, two monoammonium/diammonium phosphate (MAP/DAP) plants, one Storage and Shipping building, one screening/shipping building, two sulfuric acid plants, two phosphoric acid filters, three superphosphoric acid plants, one green superphosphoric plant and one acid clarification plant. The facility also has storage silos associated with the Swift Creek Mine. Also at the facility are miscellaneous insignificant emissions units and/or activities.

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Subsection B. Summary of Emissions Units.

EU No.	Brief Description
<i>Regulated Emissions Units</i>	
004	"X"-Train (Monocal/Dical process)
008	"Y" Train-#1 MAP/DAP Plant
010	#1 Storage and Shipping Building
015	Granular Product Shipping and Screening Facility
032	"Z"-Train #2 MAP/DAP Plant
054	Suwannee River Chemical Complex (SRCC) Molten Sulfur System
061	Green Superphosphoric Acid Plant
066	"E" Sulfuric Acid Plant
067	"F" Sulfuric Acid Plant
069	"D" Phosphoric Acid Plant
070	"C" and "D" Superphosphoric Acid Plants
071	Acid Clarification Plant
072	Molten Sulfur System for "E" and "F" Sulfuric Acid Plants
075	Relocatable Concrete Batch Plant
076	428 Emergency Engines
077	Emergency Rental Boiler
079	Natural Gas 230 MMBtu/ hour Auxiliary Boiler
080	Two 4.25 MMBtu/hr Boilers
081, 082	Gypsum Dewatering Stack, and Cooling Ponds
083	Rental 50 MMBtu/hour Boiler
<i>Unregulated Emissions Units and Activities</i> (see Appendix U, List of Unregulated Emissions Units and/or Activities)	
084	Temporary, portable Ammoniated Polyphosphate Plant to manufacture liquid fertilizer
085	Ammonia Vaporizer
086	Independent Micronutrient Storage and Handling System
087	Engine No. 10: Diesel Engine 600KW

SECTION I. FACILITY INFORMATION.

Also included in this permit are miscellaneous insignificant emissions units and/or activities (see Appendix I, List of Insignificant Emissions Units and/or Activities).

{Permitting Note: The following emission units are permanently shut-down:

EU 001 (#2 Phosphate Rock Grinder); EU 003 "A" Defluorinated Phosphate (DFP) Plant; EU 021 ("C" Sulfuric Acid Plant); EU 006 (SRM silos), EU 009 (SRM East Dryer), EU 013 (SRM Rock Grinder), EU 016 (#1 SRCC Phosphate Rock Grinder, EU 017 (SRM West Rock Dryer); "B" Phosphoric Acid Plant (EU 020; South Phosphoric Acid Filter (EU 034); North Phosphoric Acid Filter (EU 035); "B" Superphosphoric Acid Plant (EU 036); "C" Auxiliary Boiler (EU 039); "D" Auxiliary Boiler (EU 040); EU022 ("D" Sulfuric Acid Plant); EU 038 ("B" Defluorinated Phosphate (DFP) Plant); EU 044 (Defluorinated Phosphate (DFP) Coolers); EU 062 (Defluorinated Phosphate (DFP) Product Silos); EU 064 (Swift Creek Mine Rock Dryer); and EU 065 (Swift Creek Mine Silos); EU 068 ("E" Auxiliary Boiler).}

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Subsection C. Applicable Requirements.

Based on the Title V air operation permit renewal application received May 25, 2021, this facility is a major source of hazardous air pollutants (HAP). This facility is classified as a Prevention of Significant Deterioration (PSD) major stationary source in accordance with Rule 62-212.400, F.A.C.

A summary of important applicable requirements is shown in the following table.

Applicable Requirement	EU No(s).
40 CFR 60, Subpart A, Standards of Performance for New Stationary Sources (NSPS) General Provisions	008, 032, 066, 067, 076, 077, 079, 080, 083
40 CFR 60, Subpart Db, Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units	079
40 CFR 60, Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units	077, 080, 083
40 CFR 60, Subpart H, Standards of Performance for Sulfuric Acid Plants	066, 067
40 CFR 60 Subpart T (see Subsections for applicability)	008, 032
40 CFR 60 Subpart U (see Subsections for applicability)	061
40 CFR 60 Subpart V (see Subsections for applicability)	069
40 CFR 60, Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	-Facility Asset #2246 (No FDEP Engine ID); -Facility Asset #2608 (Engine No. 17); and -Facility Asset #2607 (Engine No. 18) <u>These engines are part of EU 076</u>
40 CFR 60, Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines	-Facility Asset #2268 (No FDEP Engine ID); -Facility Asset #2707 (No FDEP Engine ID); and -Facility Asset #2246 (Engine No. 15) <u>These engines are part of EU 076</u>

SECTION I. FACILITY INFORMATION.

40 CFR 61, Subpart A - NESHAP General Provisions	081, 082
40 CFR 61, Subpart R - National Emission Standards for Hazardous Air Pollutants (NESHAP) for Radon Emissions from Phosphogypsum Stacks	081, 082
40 CFR 63, Subpart A, NESHAP (a.k.a. MACT) General Provisions	008, 032, 061, 069, 070, 076, 079, 080, 081, 082, 083
40 CFR 63, Subpart AA - NESHAP (a.k.a. MACT) From Phosphoric Acid Manufacturing Plants	061, 069, 070, 081, 082
40 CFR 63, Subpart BB, NESHAP (a.k.a. MACT) from Phosphate Fertilizers Production Plants	008, 032
40 CFR 63, Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (RICE)	-Facility Asset #2268 (No FDEP Engine ID);; -Facility Asset #2707 (No FDEP Engine ID); -Facility Asset #2246 (Engine No. 15); -Facility Asset #2682 (No FDEP Engine ID); -Facility Asset #016 (No FDEP Engine ID); -Facility Asset #2608 (Engine No. 17); and -Facility Asset #2607 (Engine No. 18) -Facility Asset # 1593 (Engine No. 6) <u>These engines are part of EU 076</u>
40 CFR 63, Subpart DDDDD, NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters	079, 080, 083
Rule 62-210.300, F.A.C., Permits Required	All 'regulated' and 'unregulated' EUs
Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD), Best Available Control Technology (BACT)	032, 066, 067, 069, 070, 071
Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards	004, 008, 010, 015, 032, 054, 061, 070, 072, 075
Rule 62-296.340, BART, F.A.C.	004, 008, 010, 015, 032, 054
Rule 62-296.402, F.A.C., Sulfuric Acid Plants	066, 067
Rule 62-296.403, Phosphate Processing Fluorides Limits	004, 008, 010, 015, 032, 061,

SECTION I. FACILITY INFORMATION.

	069, 070
Rule 62-296.406, F.A.C., Fossil Fuel Steam Generators with less than 250 MMBtu/hour Heat Input, New and Existing Units	077, 079, 080, 083
Rule 62-296.414, F.A.C., Concrete Batching Plants, F.A.C.	075

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Proposed

SECTION II. FACILITY-WIDE CONDITIONS.

The following conditions apply facility-wide to all emissions 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. This regulation does not impose a specific testing requirement. [Rule 62-296.320(4)(b), 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. The particulate matter on roadways and any storage piles shall be controlled from entrainment into the air by moisture applications if necessary.

[Rule 62-296.320(4)(c), F.A.C.; proposed by applicant in the Title V air operation permit renewal application received on May 25, 2021.]

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

SECTION II. FACILITY-WIDE CONDITIONS.

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: <https://floridadep.gov/air/permitting-compliance/content/title-v-fees>. [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 and to the US. EPA at the address shown below within 60 days after the end of each calendar year during which the Title V air operation permit was effective. (See also Appendix RR, Conditions RR1 and RR7.) [Rules 62-213.440(3)(a)2. & 3. and (b), F.A.C.]

U.S. Environmental Protection Agency, Region 4
Atlanta Federal Center
61 Forsyth Street, SW
Atlanta, Georgia 30303

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 27P-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://www2.epa.gov/rmp>. 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: U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response, 1200 Pennsylvania Ave. NW, Mail Code: US EPA (5101T), Washington, DC 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 27P-21, F.A.C.]

SECTION II. FACILITY-WIDE CONDITIONS.

FW9. Semi-Annual Reports. The permittee shall monitor compliance with the terms and conditions of this permit and shall submit reports at least every six months to the compliance office. Each semi-annual report shall cover the 6-month periods of January 1 - June 30 and July 1 - December 31. The reports shall be submitted by the 60th day following the end of each calendar half (i.e., March 1st and August 29th of every year). All instances of deviations from permit requirements (including conditions in the referenced Appendices) must be clearly identified in such reports, including reference to the specific requirement and the duration of such deviation. If there are no deviations during the reporting period, the report shall so indicate. Any semi-annual reporting requirements contained in applicable federal NSPS or NESHAP requirements may be submitted as part of this report. The submittal dates specified above shall replace the submittal dates specified in the federal rules. All additional reports submitted as part of this report should be clearly identified according to the specific federal requirement. All reports shall include a certification by a responsible official, pursuant to subsection 62-213.420(4), F.A.C. (See also Conditions RR2. – RR4. of Appendix RR, Facility-wide Reporting Requirements, for additional reporting requirements related to deviations.) [Rule 62-213.440(1)(b)3.a., F.A.C.; and, 40 CFR 60.19, 40 CFR 61.10 & 40 CFR 63.10.]

{Permitting Note: EPA has clarified that, pursuant to 40 CFR 70.6(a)(3), the word “monitoring” is used in a broad sense and means monitoring (i.e., paying attention to) the compliance of the source with all emissions limitations, standards, and work practices specified in the permit.}

FW10. MACT Monitoring. For the emission units that are subject to monitoring of indicator ranges under MACT, upon successful compliance testing at a new indicator range, the permittee shall operate under the new indicator ranges. Under no circumstance is the NED-DEP authorizing the facility to operate outside of the MACT Rule or out of compliance. The effective date of the new indicator range is the time when the compliance test is submitted as a final report to the agency. [Rule 62-4.070(1)&(3), F. A. C.]

FW11. Compliance Plan CP-6. EUs 032, 061, 069 and 070: The Permittee shall demonstrate compliance using the Continuous Parameter Monitoring System (CPMS) for liquid and gas flow at the inlet of the absorber, and pressure drop, as applicable or alternate monitoring plan (AMP), and compliance testing as required under 40 CFR 63, Subparts AA and BB. This facility is subject to the attached Appendix CP-6. [Rule 62-213.440(1), F.A.C.]

{40 CFR 60, 61 & 63 Permitting Note: The term “Administrator,” when used in any provision of 40 CFR 60, 61 & 63 that is delegated to the Department by the U.S. Environmental Protection Agency (U.S. EPA), shall mean the Secretary or the Secretary’s designee, unless the authority is specifically retained by U.S. EPA.}

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SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Unit 004

“X”-Train (Monocal/Dical process)

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

EU No.	Brief Description
004	“X”-Train (Monocal/Dical process)

Detailed Description:

This emissions unit is the “X”-Train (Monocal/Dical Process). It includes various emission points including a limestone storage silo, EP 04.

Limestone storage silo, EP 04. A limestone storage silo is located in EU No. 004, which is identified as EP 04. The silo receives limestone pneumatically from a tanker truck, stores the limestone and then discharges the limestone to the “X”-Train process. This process also unloads limestone from the silo into a tanker truck for other uses.

Air Pollution Control Systems and Measures:

X”-Train (Monocal/Dical Process). Emissions are controlled from emission points (EPs) by the following control devices: 1) “X”-Train (Monocal/Dical Process) by venturi and cyclonic scrubbers; 2) Dedust bin by a baghouse, 3) Shipping area by a baghouse; 4) Limestone silo by a baghouse, EP 04 Unloading of limestone from the existing limestone storage silo back into trucks for other uses; 5) Reclaim bin by a baghouse; and, 6) Material Handling by a baghouse.

EP 01) “X”-Train (Monocal/Dical Process) by venturi and cyclonic scrubbers;

EP 02) Dedust bin by a baghouse;

EP 03) Shipping area by a baghouse;

EP 04) Limestone silo by a baghouse used for unloading of limestone from the existing limestone storage silo into trucks;

Limestone storage silo, EP 04. Displaced air and PM emissions from the truck loading will be vented back into the silo. Particulate matter (PM) emissions from displaced air in the silo are controlled by a Flex-Kleen Baghouse, Model No. 100-WRB-48, with a stated cloth area of 576 square feet, and a nominal air flow of 2750 actual cubic feet per minute (ACFM);

EP 05) Reclaim bin by a baghouse; and,

EP 06) Material Handling by a baghouse.

Stack Parameters:

X”-Train (Monocal/Dical Process). The main stack exhausts the process. The stack exhaust gas characteristics are typically as follows: exhaust gas temperature of 120° F; exhaust gas flow rate 92,400 acfm; stack height of 120 ft; and, stack diameter of 7 feet.

{Permitting Note: This emissions unit is regulated under Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards; Rule 62-296.340, BART, F.A.C.; and, Rule 62-296.403, Phosphate Processing Fluorides Limits.}

Essential Potential to Emit (PTE) Parameters

A.1. Permitted Capacity. The rate for this emissions unit shall not exceed the maximum 12-monthly rolling average (MRA) hourly rate of 40 tons of product or the maximum daily 1-hour average rate of 45 tons of product. The 12-MRA hourly rate maximum shall not be exceeded by the 12-MRA hourly rate calculated by averaging each monthly hourly average with the previous 11 monthly hourly averages. [Rules 62-4.160(2) and 62-210.200, Definitions - Potential to Emit (PTE), F.A.C.; and, Permit No. 0470002-034-AC.]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Unit 004

“X”-Train (Monocal/Dical process)

- A.2. Emissions Unit Testing.** See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]
- A.3. Hours of Operation.** This emissions unit may operate continuously (8,760 hours/year). [Rule 62-210.200, PTE, F.A.C.]
- A.4. Methods of Operation - X”-Train (Monocal/Dical Process).** The methods of operation are as follows:
Mode 1 - Dical (dicalcium phosphate) with 18.5% P production;
Mode 2 - Monocal (monocalcium phosphate) with 21.0% P production;
Mode 3 - This is a non-production mode involving the transfer of Monocal or Dical from railcar to trucks; and, the transfer of Monocal or Dical from railcars to the Dical silos for further transfer to trucks using a portion of the existing X-Train transfer equipment. The associated pollution control equipment shall be operated normally during any loading operations.
[Rule 62-213.410, F.A.C.; and, Permit Nos. 0470002-066-AC & 0470002-072-AC.]
- A.5. Methods of Operation - Rotary Dryer.** Natural gas shall be fired in the rotary dryer as the primary fuel. Fuel oil with a maximum sulfur content of 1.5% by weight may be fired as a backup fuel. [Rule 62-213.410, 62-296.340, BART, F.A.C.; and, Permit No. 0470002-055-AC.]

On-specification Used Oil/Lead

- A.6. On-specification Used Oil - Lead Emissions Cap.** The lead emissions cap for the facility is 9.4 TPY. The on-specification used oil fired to all units shall not exceed 24,000,000 gallons per year which at 100 ppm yields 9.4 TPY of lead emissions. [Requested by the Applicant.]
- A.7. On-specification Used Oil - Specifications.** On-specification used oil The on-spec used oil prior to blending shall comply with the limits listed below and shall be recorded:

ON-SPEC USED OIL SPECIFICATIONS	
Constituent/Property	Allowable Level
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Total Halogens	1,000 ppm maximum
Flash Point	100°F minimum

[40 CFR 761.]

- A.8. On-specification Used Oil - Operations.** On-specification used oil may be fired as follows:
1. At any time provided the maximum concentration of PCBs shall be less than 2 ppm and whether generated on or off-site. The analysis and recordkeeping requirements apply to each amount prior to blending even if to be blended with 90% virgin oil.
2. Only during normal operation temperature and not during startup or shutdown if the maximum concentration of PCBs is ≥ 2 but < 50 ppm.
[40 CFR 761]
- A.9. On-specification Used Oil - Analysis.** A certified on-specification used oil analysis of each delivery prior to blending shall be retained (in lieu of testing) and reported as part of the AOR. [Rule 62-210.370(3), F.A.C.]

Air Pollution Control Systems and Measures

- A.10. Baghouses.** The baghouse control systems shall be operated and maintained to effectively control particulate matter emissions from each of the emission points identified above (X”-Train Monocal/Dical

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Unit 004

“X”-Train (Monocal/Dical process)

Process - EP02, 03, 04, 05 and 06) for the regulated emission units. [Rules 62-4.070(1)&(3) and 62-296.340, BART, F.A.C.; and, Permit No. 0470002-055-AC.]

A.11. (This condition applies to emission points 02, 03, 04, 05, 06) Baghouse Design Specification.

Bags/filters in each baghouse control system shall be selected based on a design outlet specification of 0.01 grains per actual cubic feet of exhaust. Compliance shall be demonstrated by maintaining the appropriate records. No stack testing is required. [Rules 62-4.070(1)&(3) and 62-296.340, BART, F.A.C.; and, Permit No. 0470002-055-AC.]

A.12. Wet Scrubbers. The wet scrubber controls shall be operated and maintained to effectively control particulate matter emissions from each of the emission points identified above (X”-Train Monocal/Dical Process - EP01) for the regulated emission units. [Rules 62-4.070(1)&(3) and 62-296.340, BART, F.A.C.; and, Permit No. 0470002-055-AC.]

A.13. Wet Scrubber Parameters. For each wet scrubber (X”-Train Monocal/Dical Process - EP01), the permittee shall install, operate and maintain devices to continuously monitor the scrubber water flow rate, the pressure drop across the scrubber and the fan amperage. The scrubber parameters shall be continuously monitored and manually recorded at least once during each eight-hour block of operation. Alternatively, the parametric data may be continuously recorded. During each required compliance test, such data shall be recorded at 15-minute intervals. [Rules 62-4.070(1)&(3) and 62-296.340, BART, F.A.C.; and, Permit No. 0470002-055-AC.]

A.14. General Best Operational Practices. Best operational practices to minimize leaks of sulfur dioxide and sulfur trioxide, or other fugitive process emissions shall be adhered to and shall include regular inspections and prompt repair or correction of any leaks or other fugitive emissions. [Rule 62-296.320, F.A.C.; and, Permit No. 0470002-055-AC.]

Emission Limitations and Standards

Unless otherwise specified, the averaging time(s) for Specific Conditions **A.15. - A.34.** are based on the specified averaging time of the applicable test method.

A.15. Nitrogen Oxides Emissions. Nitrogen oxides emissions (expressed as NO₂) shall be controlled by the inherent combustion design of the existing unit and the firing of the natural gas as the primary fuel. [Permit No. 0470002-055-AC.]

Emission Point 01 (X-Train)

Mode 1:

A.16. Total Fluoride Emissions. Total fluoride emissions shall not exceed 0.63 lb/hr and 2.76 TPY. [Rule 62-296.403(2), F.A.C.]

A.17. Particulate Matter Emissions. Particulate matter emissions shall not exceed 18.0 lbs/hr as determined by EPA Method 5. [Rule 62-296.320(4)(a) and Rule 62-296.340, BART, F.A.C.; Construction Permit 0470002-055-AC.]

A.18. Sulfur Dioxide Emissions.

(a) Sulfur dioxide emissions shall not exceed 11.10 lbs/hr and 48.62 TPY. [PSD FL-083.]

(b) The firing of the fuels as stated in Specific Condition **A.4.** shall be used to control sulfur dioxide emissions. [Rules 62-4.070(1)&(3) and 62-296.340, BART, F.A.C., and, Permit No. 0470002-055-AC.]

A.19. Visible Emissions. ~~Visible emissions shall not be equal to or greater than 20% opacity. [Rule 62-296.320(4)(b), F.A.C.]~~

Mode 2:

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Unit 004

“X”-Train (Monocal/Dical process)

A.20. Total Fluoride Emissions. Total fluoride emissions shall not exceed 0.63 lb/hr and 2.76 TPY. [Rule 62-296.403(2), F.A.C.]

A.21. Particulate Matter Emissions. Particulate matter emissions shall not exceed 18.0 lbs/hr as determined by EPA Method 5. [Rules 62-296.320(4)(a) and 62-296.340, BART, F.A.C.; and, Permit 0470002-055-AC.]

A.22. Sulfur Dioxide Emissions.

(a) Sulfur dioxide emissions shall not exceed 11.10 lbs/hr and 48.62 TPY. [PSD FL-083.]

(b) The firing of the fuels as stated in Condition A.4. shall be used to control sulfur dioxide emissions. [Rules 62-4.070(1)&(3) and 62-296.340, BART, F.A.C.; and, Permit No. 0470002-055-AC.]

A.23. Visible Emissions. Visible emissions shall not be equal to or greater than 20% opacity. [Rule 62-296.320(4)(b), F.A.C.]

Emission Point 02 (Dedust)

Modes 1 and 2:

A.24. Opacity Standard. Visible emissions from each baghouse exhaust shall not exceed 5% opacity as determined by EPA Method 9. [Rules 62-297.620(4), 62-4.070(1)&(3) and 62-296.340, BART, F.A.C.; and, Permit No. 0470002-055-AC.]

A.25. Particulate Matter Emissions. Particulate Matter Emissions from the baghouse shall not exceed 0.01gr/acfm. [Rules 62-4.070(1)&(3) and 62-296.340, BART, F.A.C.; and, Permit No. 0470002-055-AC.]

Emission Point 03 (Shipping)

Modes 1 and 2:

A.26. Opacity Standard. Visible emissions from each baghouse exhaust shall not exceed 5% opacity as determined by EPA Method 9. [Rules 62-297.620(4), 62-4.070(1)&(3) and 62-296.340, BART, F.A.C.; and, Permit No. 0470002-055-AC.]

A.27. Particulate Matter Emissions. Particulate matter emissions from the baghouse shall not exceed 0.01gr/acfm. [Rules 62-4.070(1)&(3) and 62-296.340, BART, F.A.C., Permit No. 0470002-055-AC.]

Emission Point 04 (X-Train)

A.28. Silo. The silo has a storage capacity of 2,000 tons of limestone. The applicant shall operate the baghouse (including the fan) at all times that the limestone is being loaded into the silo, unloaded from the silo, or discharged into the X-Train process. [Permit No. 0470002-072-AC.]

A.29. Opacity Standard. Visible emissions from each baghouse exhaust shall not exceed 5% opacity as determined by EPA Method 9. [Rules 62-297.620(4), 62-4.070(1)&(3) and 62-296.340, BART, F.A.C.; and, Permit Nos. 0470002-055-AC & 0470002-072-AC.]

A.30. Particulate Matter Emissions. Particulate matter emissions from the baghouse shall not exceed 0.01gr/acfm. [Rules 62-4.070(1)&(3) and 62-296.340, BART, F.A.C.; and, Permit No. 0470002-055-AC.]

Emission Point 05 (Reclaim Bin)

Modes 1 and 2:

A.31. Opacity Standard. Visible emissions from each baghouse exhaust shall not exceed 5% opacity as determined by EPA Method 9. [Rules 62-297.620(4), 62-4.070(1)&(3), and 62-296.340, BART, F.A.C.; and, Permit No. 0470002-055-AC.]

A.32. Particulate Matter Emissions. Particulate matter emissions from the baghouse shall not exceed 0.01gr/acfm. [Rules 62-4.070(1)&(3) and 62-296.340, BART, F.A.C.; and, Permit No. 0470002-055-AC]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Unit 004

“X”-Train (Monocal/Dical process)

Emission Point 06 (Fugitive Dust)

Modes 1 and 2:

A.33. Opacity Standard. Visible emissions from each baghouse exhaust shall not exceed 5% opacity as determined by EPA Method 9. [Rules ~~62-296.320(4)(b)~~; 62-297.620(4), 62-4.070(1)&(3) and 62-296.340, BART, F.A.C.; and, Permit Nos. 0470002-038-AC; 0470002-055-AC.]

A.34. Particulate Matter Emissions. Particulate matter emissions from the baghouse shall not exceed 0.01gr/acfm. [Rules 62-4.070(1)&(3) and 62-296.340, BART, F.A.C.; and, Permit No. 0470002-055-AC.]

Excess Emissions

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

A.35. Excess Emissions Allowed. Excess emissions resulting from startup, shutdown or malfunction of any emissions unit 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.36. 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.]

A.37. Excess Emissions Notification. In case of excess emissions resulting from a malfunction, the permittee shall immediately notify the Air Compliance Section of the Northeast District Office of the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(5), F.A.C.]

Test Methods and Procedures

Emission Point 01 (X-Train)

Modes 1 and 2:

A.38. Total Fluoride Emissions. The fluoride emissions stack test method shall be EPA Method 13A or 13B, incorporated and adopted by reference in Chapter 62-204.800, F.A.C. and be performed once every calendar year (January 1 - December 31). [Rules 62-296.403(3) and 62-297.310(8)(a)1., F.A.C.]

A.39. Particulate Matter Emissions. The particulate matter emissions stack test method shall be EPA Method 5, incorporated and adopted by reference in Chapter 62-204.800, F.A.C. and be performed once every calendar year (January 1 - December 31). [Rules 62-296.320(4)(a), 62-297.310(8)(a)1. and 62-204.800, F.A.C.; 40 CFR 60, Appendix A; and, Permit No. 0470002-055-AC.]

A.40. Sulfur Dioxide Emissions. In lieu of stack testing, the permittee shall comply with the applicable requirements in Rule 62-297.440(1), F.A.C. or maintain a record of acceptable, certified analyses of all fuel oil fired and report annually by April 1 of each year. [Rule 62-297.440(1), F.A.C.]

A.41. Visible Emissions. ~~The visible emissions test method shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-204.800, F.A.C. and be performed once every calendar year (January 1 - December 31). [Rules 62-296.320(4)(b) and 62-297.310(8)(a)1. F.A.C.]~~

Emission Point 01 (X-Train)

Mode 3:

A.42. Visible Emissions. Visible emissions shall not exceed 5% opacity for Mode 3 or railcar to trucks or railcar and to silos.

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Unit 004

“X”-Train (Monocal/Dical process)

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

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

- A.43. Visible Emissions.** The visible emissions test method shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-204.800, F.A.C. ~~[Rule 62-296.320(4)(b), F.A.C.]~~

Emission Point 02 (Dedust)

Modes 1 and 2:

- A.44. Visible Emissions.** The visible emissions test method shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-204.800, F.A.C. and be performed once every calendar year (January 1 - December 31). [Rules ~~62-296.320(4)(b)~~, 62-204.800, 62-296.340(3)(b)2. and 62-297.310(8)(a)1., F.A.C.; 40 CFR 60, Appendix A; and, Permit No. 0470002-055-AC.]

Emission Point 03 (Shipping)

Modes 1 and 2:

- A.45. Visible Emissions.** The visible emissions test method shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-204.800, F.A.C. and be performed once every calendar year (January 1 - December 31). [Rules ~~62-296.320(4)(b)~~ and 62-297.310(8)(a)1., F.A.C.]

Emission Point 04 (Limestone Silo)

Modes 1 and 2:

- A.46. Visible Emissions.** The visible emissions test method shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-204.800, F.A.C. and be performed once every calendar year (January 1 - December 31). Annual VE testing shall be performed for a minimum period of 30 minutes while the silo is being loaded from a tanker truck or during the loading of a tanker truck from the silo. [Rules ~~62-296.320(4)(b)~~, 62-4.070(1)&(3) and 62-297.310(8)(a)1., F.A.C.; and, Permit No. 0470002-072-AC.]

Emission Point 05 (Reclaim Bin)

Modes 1 and 2:

- A.47. Visible Emissions.** The visible emissions test method shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-204.800, F.A.C. and be performed once every calendar year (January 1 - December 31). [~~Rule 62-296.320(4)(b), F.A.C.~~ Rule 62-297.310(8)(a)1., F.A.C.]

Emission Point 06 (Fugitive Dust)

Modes 1 and 2:

- A.48. Visible Emissions.** The visible emissions test method shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-204.800, F.A.C. and be performed annually once every calendar year (January 1 - December 31). [Rule ~~62-296.320(4)(b), F.A.C.~~ Rule 62-297.310(8)(a)1, F.A.C.]
- A.49. Parametric data.** Parametric data recorded for the wet scrubber during each test shall be provided with the required test report. As necessary, EPA Methods 1-4 shall be conducted to support the other test methods. [Rules 62-297.310(7)9., 62-4.070(1)&(3), and 62-296.340, BART, F.A.C.; and, Permit No. 0470002-055-AC.]
- A.50. Test Methods.** When required, tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
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SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Unit 004

“X”-Train (Monocal/Dical process)

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
13B	Determination of Total Fluoride emissions from stationary sources - Specific Ion Electrode Method

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 62-204.800, F.A.C.; and, 40 CFR 60, Appendix A.]

{Permitting Note: During opacity testing, Rule 62-297.310(3)(b), F.A.C does not apply. Rule 62-297.310(5)(b), F.A.C. shall apply during opacity test observation period. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. See Appendix TR, Conditions TR.2 and TR.4.}

- A.51. Common Testing Requirements.** Unless otherwise specified, any 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.]

{Permitting Note: Air compliance test notifications can now be completed online in the Department's Business Portal. To access this online process, go to <http://www.fldepportal.com/go/home> and sign in (or register if you're a new user) from the link in the upper right corner of the page. On the Welcome page select the Submit option, then select Registration/Notification, and then click on Air Compliance Test Notifications. Once in the process, just carefully read the instructions on each screen (and under the Help tabs) to complete the notification.}

Recordkeeping and Reporting Requirements

- A.52. On-specification Used Oil - Lead Emissions Report.** A lead emissions report shall be submitted by each April 1 as part of the AOR in a table format showing all of data and results required to document that the lead emissions cap has not been exceeded for the previous calendar year. [Rule 62-210.370(3), F.A.C.]

- A.53. Baghouses Records.** The permittee shall maintain records on site of the vendor data sheets that demonstrate compliance with the baghouse design outlet specification for the bags/filters. [Rules 62-4.070(1)&(3) and 62-296.340, BART, F.A.C.; and, Permit No. 0470002-055-AC.]

- A.54. Wet Scrubber Records.** The permittee shall maintain records on site of the scrubber water flow rate and the pressure drop across the scrubber. In addition, the following vendor design information shall be maintained on site for each wet scrubber: exhaust flow rate; scrubber water flow rate; scrubber pressure drop; dust inlet loading; dust outlet loading; and, control efficiency. [Rules 62-4.070(1)&(3) and 62-296.340, BART, F.A.C.; Permit No. 0470002-055-AC.]

- A.55. Other Reporting Requirements.** See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

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SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection B. Emissions Unit 008

“Y” Train-#1 MAP/DAP Plant

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

EU No.	Brief Description
008	“Y” Train-#1 MAP/DAP Plant

Detailed Description:

The “Y” Train-#1 MAP/DAP Plant is capable of producing fertilizer by seven different modes (Mode 1: DAP by split flows of 30% & 50% P₂O₅ phosphoric acid; Mode 2: DAP by 40% P₂O₅ acid; Mode 4: MAP by split flows of 30% & 50% P₂O₅ acid; Mode 5: MAP by 40% P₂O₅ acid; Mode 6: MAP by reacting ammonia and acid in two pipe reactors; Mode 7 - MAP/DAP with the addition of the micronutrients; and, Mode 8 - MAP/DAP with the addition of solid or liquid sulfur and zinc oxide/sulfate using a proprietary enclosed process.) The plant consists of the two separate pipe reactors (Mode 6), a tank reactor for the other modes, two pug mills, dryer, cooler, screens, mills, and other associated process equipment.

Air Pollution Control Systems and Measures:

Particulate matter, fluoride and sulfur dioxide emissions are controlled by cyclones, venturi and cyclonic scrubbers. Emissions from the pipe reactors are vented to the reactor scrubber for ammonia removal and then to a scrubber for fluoride control.

Stack Parameters:

The stack exhaust gas characteristics are typically as follows: exhaust gas temperature of 120° F; exhaust gas flow rate 92,400 acfm; stack height of 120 ft; and, stack diameter of 7 feet.

{Permitting Note: This emissions unit is regulated under: 40 CFR 60, Subpart V, Standards of Performance for the Phosphate Fertilizer Industry: Diammonium Phosphate Plants, adopted and incorporated by reference in Rule 62-204.800(8)(b)30., F.A.C. (Note, Permit No. 0470002-050-AC made EU 008 regulated under 40 CFR 60, Subpart V for DAP production.); 40 CFR 63, Subpart BB - NESHAP from Phosphate Fertilizers Production Plants, adopted by reference in Rules 62-204.800(11)(b)19., F.A.C.; and, Rule 62-296.403, Phosphate Processing Fluorides Limits. Pursuant to 40 CFR 63.631, this unit is exempted from any otherwise applicable NSPS standard contained in 40 CFR 60, Subpart V, Subpart W or Subpart X, as long as the facility has a current Title V air operation permit and this unit remains in compliance with the requirements of 40 CFR 63, Subpart BB.}

Essential Potential to Emit (PTE) Parameters

- B.1. Permitted Capacity.** The P₂O₅ feed shall not exceed 36.33 tons per hour (TPH, daily average) and 290,112 tons per year (TPY) of P₂O₅ input basis, 12-month rolling total. Solid or liquid sulfur and zinc oxide/sulfate, and micronutrients may be added to the process yet this will not be a significant change (<2% zinc) in the product. The rest of the process remains unchanged. [Rules 62-4.160(2) and 62-210.200, Definitions - Potential to Emit (PTE), F.A.C.; Permit Nos. 0470002-034-AC; 0470002-050-AC; 0470002-079-AC & 0470002-119-AC, Specific Condition 3.3.]
- B.2. Emissions Unit Testing.** See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]
- B.3. Hours of Operation.** This emissions unit may operate continuously (8,760 hours/year). [Rule 62-210.200, PTE, F.A.C.; and, Permit No. 0470002-050-AC.]
- B.4. Methods of Operation - Products.**
1. Mode 1 - DAP (Diammonium Phosphate) produced by Split Acid (30% & 50% P₂O₅ input) phosphoric acid.
 2. Mode 2 - DAP (Diammonium Phosphate) produced by 40% P₂O₅ input phosphoric acid.
 3. Mode 4 - MAP (Monoammonium Phosphate) produced by Split Acid (30% & 50% P₂O₅ input) phosphoric acid.

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection B. Emissions Unit 008

“Y” Train-#1 MAP/DAP Plant

4. Mode 5 - MAP (Monoammonium Phosphate) produced by 40% P₂O₅ input phosphoric acid.
5. Mode 6 - MAP produced by reacting ammonia and acid in two pipe reactors.
6. Mode 7 - MAP/DAP with the addition of the micronutrients.
7. Mode 8 - MAP/DAP with the addition of solid or liquid sulfur and zinc oxide/sulfate using a proprietary enclosed process.

Only one of the seven operating modes (listed above) shall be in operation at one time.

[Rule 62-213.410, F.A.C.; and, Permit Nos. 0470002-050-AC & 0470002-119-AC, Specific Condition 3.5.]

B.5. Methods of Operation - Fuels. Natural gas shall be fired in the rotary dryer as the primary fuel. Fuel oil with a maximum sulfur content of 1.5% by weight may be fired as a backup fuel. [Rules 62-213.410, 62-4.070(1)&(3) and 62-296.340, BART, F.A.C.; and, Permit No. 0470002-055-AC.]

B.6. Methods of Operation - On-specification used oil - firing. On-specification used oil may be fired as follows:

1. At any time provided the maximum concentration of PCBs shall be less than 2 ppm and whether generated on or off-site. The analysis and recordkeeping requirements apply to each amount prior to blending even if to be blended with 90% virgin oil.
2. Only during normal operation temperature and not during startup or shutdown if the maximum concentration of PCBs is ≥ 2 but < 50 ppm.

[Rules 62-213.410, F.A.C.; and, 40 CFR 761.]

Air Pollution Control Systems and Measures

B.7. Wet Scrubbers. The wet scrubber controls shall be operated and maintained to effectively control particulate matter emissions from each of the emission points for the regulated emissions unit. [Rules 62-4.070(1)&(3) and 62-296.340, BART, F.A.C.; and, Permit No. 0470002-055-AC.]

B.8. General Best Operational Practices. Best operational practices to minimize leaks of sulfur dioxide and sulfur trioxide, or other fugitive process emissions shall be adhered to and shall include regular inspections and prompt repair or correction of any leaks or other fugitive emissions. [Rules 62-4.070(1)&(3), 213.440(1) and 62-296.320, F.A.C.; and, Permit No. 0470002-055-AC.]

Emission Limitations and Standards

Unless otherwise specified, the averaging time(s) for Specific Conditions **B.9. - B.13.** are based on the specified averaging time of the applicable test method.

Emission Point 01

Modes 1-2, 4-5

B.9. Sulfur Dioxide.

- a. Sulfur dioxide emissions shall not exceed 11.10 lbs/hr and 48.62 TPY. [From 11/82 PSD model.]
- b. The firing of the permitted fuels shall be used to control sulfur dioxide emissions.

{Permitting Note: The SO₂ limits only apply to Modes 1-2 and 4-5.}

[Rules 62-4.070(1)&(3) and 62-296.340, BART, F.A.C.; and, Permit Nos. 0470002-055-AC & 0470002-119-AC, Specific Condition 3.8.]

All Modes

B.10. Total Fluoride Emissions. Total fluoride emissions shall not exceed 30 grams/metric ton of equivalent P₂O₅ feed (0.060 lb/ton), 2.18 lb/hr and 9.54 TPY. [40 CFR 60.222(a); 40 CFR 63.622(a); and, Permit 0470002-050-AC.]

B.11. Visible Emissions. Visible emissions shall not be equal to or greater than 20% opacity. [Rule 62-296.320(4)(b), F.A.C.]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection B. Emissions Unit 008

“Y” Train-#1 MAP/DAP Plant

- B.12. Particulate Matter Emissions.** Particulate matter emissions shall not exceed 9.2 lbs/hr as determined by EPA Method 5. [Rule 62-296.320(4)(a), F.A.C.; and, Permit 0470002-055-AC.]
- B.13. Nitrogen Oxides Emissions.** Nitrogen oxides emissions (expressed as NO₂) shall be controlled by the inherent combustion design of the existing unit and the firing of the natural gas as the primary fuel. [Rule 62-070(1)&(3), F.A.C.; and, Permit No. 0470002-055-AC.]
- B.14. On-Spec Used Oil - Lead.** The lead emissions cap for the facility is 9.4 TPY. The on-specification used oil fired to all units shall not exceed 24,000,000 gallons per year which at 100 ppm yields 9.4 TPY of lead emissions. [Rule 62-070(1)&(3), F.A.C.]
- B.15.** The on-spec used oil prior to blending shall comply with the limits listed below and shall be recorded:

ON-SPEC USED OIL SPECIFICATIONS	
Constituent/Property	Allowable Level
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Total Halogens	1,000 ppm maximum
Flash Point	100°F minimum

[40 CFR 279.11.]

Excess Emissions

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

- B.16. Excess Emissions Allowed.** Excess emissions resulting from startup, shutdown or malfunction of any emissions unit 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.]
- B.17. 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(1), F.A.C.]
- B.18. Excess Emissions Notification.** In case of excess emissions resulting from a malfunction, the permittee shall immediately notify the Air Compliance Section of the Northeast District Office of the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(5), F.A.C.]

Monitoring of Operations

- B.19. Phosphorus-bearing material - flow monitoring device.** The permittee shall install, calibrate, maintain, and operate a flow monitoring device which can be used to determine the mass flow of phosphorus-bearing feed material to the process. The flow monitoring device shall have an accuracy of ± 5 percent over its operating range. [40 CFR 60.223(a).]
- B.20. Phosphorus-bearing material - continuous monitoring system.** The permittee shall install, calibrate, maintain, and operate a continuous monitoring system (CMS) according to your site-specific monitoring plan specified in 40 CFR 63.628(c). The CMS must have an accuracy of ± 5 percent over its operating range and must determine and permanently record the mass flow of phosphorus-bearing material fed to the process. [40 CFR 63.625(a)(1).]
- B.21. P₂O₅ Feed.** The permittee shall maintain a daily record of equivalent P₂O₅ feed. [40 CFR 60.223(b).]

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B.22. Scrubber Pressure Drop. The permittee shall install, calibrate, maintain, and operate a monitoring device which continuously measures and permanently records the total pressure drop across the scrubbing system. The monitoring device shall have an accuracy of ± 5 percent over its operating range; or comply with the terms of an approved alternate monitoring plan (AMP). [40 CFR 60.223(c)]

B.23. Scrubber Pressure Drop and Liquid Flow Rate. The facility must install a continuous parameter monitoring system (CPMS) and comply with the requirements specified in (1) through (3) of this Specific Condition.

- (1) The Permittee must monitor the operating parameter(s) applicable to the control device that the Permittee use as specified in Table 3 of NESHAP Subpart BB and establish the applicable limit or range for the operating parameter limit as specified in (1)(i) and (ii) of this Specific Condition, as applicable.
 - (i) Except as specified in (1)(ii) of this Specific Condition, determine the value(s) as the arithmetic average of operating parameter measurements recorded during the three test runs conducted for the most recent performance test.
 - (ii) If the Permittee use an absorber to comply with the emission limits in Table 1 or 2 of NESHAP Subpart BB and the Permittee monitor pressure drop across the absorber, the Permittee must establish allowable ranges using the methodology specified in (1)(ii)(A) and (B) of this Specific Condition.
 - (A) The allowable range for the daily averages of the pressure drop across an absorber and of the flow rate of the absorber liquid to each absorber in the process absorbing system is ± 20 percent of the baseline average value determined in (1)(i) of this Specific Condition. 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. However, the adjustment must not be reduced to less than ± 10 percent under any instance.
 - (B) As an alternative to (1)(ii)(A) of this Specific Condition, the Permittee may establish allowable ranges for the daily averages of the pressure drop across an absorber for the purpose of assuring compliance with NESHAP Subpart BB using the procedures described in this Specific Condition. The Permittee must establish the allowable ranges based on the baseline average values recorded during previous performance tests or the results of performance tests conducted specifically for the purposes of this paragraph. The Permittee must conduct all performance tests using the methods specified in 40 CFR 63.626. The Permittee must certify that the control devices and processes have not been modified since the date of the performance test from which the Permittee obtained the data used to establish the allowable ranges. When a source using the methodology of this Specific Condition is retested, the Permittee must determine new allowable ranges of baseline average values unless the retest indicates no change in the operating parameters outside the previously established ranges. Alternatively, the Permittee may comply with the terms of an approved AMP.
 - (2) The Permittee must monitor, record, and demonstrate continuous compliance using the minimum frequencies specified in Table 4-of NESHAP Subpart BB.
 - (3) The Permittee must comply with the calibration and quality control requirements that are applicable to the operating parameter(s) the Permittee monitor as specified in Table 5 of NESHAP Subpart BB.
- [40 CFR 63.625(d)(1)-(3).]

B.24. Maintaining Allowable Range of Scrubber Operation Parameters. 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(d)(1). [40 CFR 63.625.]

B.25. Wet Scrubber Parameters. For each wet scrubber, the permittee shall install, operate and maintain devices to continuously monitor the scrubber water flow rate, the pressure drop across the scrubber and the fan amperage. Such devices shall be calibrated, fully functional and in operation before conducting the initial compliance tests. The scrubber parameters shall be continuously monitored and manually recorded at least

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once during each eight-hour block of operation. Alternatively, the parametric data may be continuously recorded. During each required compliance test, such data shall be recorded at 15-minute intervals. [Rules 62-4.070(1)-(3) and 62-296.340, BART, F.A.C.; and, Permit No. 0470002-055-AC.]

Test Methods and Procedures

Emission Point 01

Modes 1, 2, 4 & 5:

B.26. Sulfur Dioxide. In lieu of stack testing, the permittee shall comply with the applicable requirements in Rule 62-297.440(1), F.A.C. or maintain a record of acceptable, certified analyses of all fuel oil fired and report annually by April 1 of each year. [Rule 62-297.440(1), F.A.C.]

All Modes:

B.27. Total Fluorides. The test method for total fluorides shall be EPA Method 13A or EPA Method 13B, incorporated and adopted by reference in Chapter 62-204.800, F.A.C. The minimum sample volume shall be 30 dry standard cubic feet. Test procedures shall meet all applicable requirements of Chapter 62-204.800, F.A.C. and be performed once every calendar year (January 1 - December 31). [Rule 62-296.403(3), F.A.C.; and, Permit No. 0470002-050-AC.]

B.28. Visible Emissions. The visible emissions test method shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-204.800, F.A.C. and be performed once every calendar year (January 1 - December 31). [Rules 62-296.320(4)(b), 62-297.310(7)(b) and 62-297.310(8)(a)1.a., F.A.C.; and, Permit No. 0470002-050-AC.]

B.29. Particulate Matter. The particulate matter emissions stack test method shall be EPA Method 5, incorporated and adopted by reference in Chapter 62-204.800, F.A.C. and be performed once every calendar year (January 1 - December 31). [Rules 62-296.320(4)(a), 62-204.800 and 62-297.310(8)(a)1., F.A.C.; 40 CFR 60, Appendix A; and, Permit Nos. 0470002-050-AC & 0470002-055-AC.]

B.30. Parametric data. Parametric data recorded for the wet scrubber during each test shall be provided with the required test report. As necessary, EPA Methods 1-4 shall be conducted to support the other test methods. [Rules 62-297.310(10), 62-4.070(1)&(3) and 62-296.340, BART, F.A.C.; and, Permit No. 0470002-055-AC.]

B.31. Operating limit. The permittee must comply with the notification requirements specified in 40 CFR 63.9. During the most recent performance test, if the permittee demonstrate compliance with the emission limit while operating your control device outside the previously established operating limit, the permittee must establish a new operating limit based on that most recent performance test and notify the Administrator that the operating limit changed based on data collected during the most recent performance test. When a source is retested and the performance test results are submitted to the Administrator pursuant to 40 CFR 63.7(g)(1), or 40 CFR 63.10(d)(2), the permittee must indicate whether the operating limit is based on the new performance test or the previously established limit. Upon establishment of a new operating limit, the permittee must thereafter operate under the new operating limit. See Specific Condition **B.23**. If the Administrator determines that the permittee did not conduct the compliance test in accordance with the applicable requirements or that the operating limit established during the performance test does not correspond to representative (normal) conditions, the permittee must conduct a new performance test and establish a new operating limit. [40 CFR 63.627(a)]

B.32. Test Methods. When 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

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Method	Description of Method and Comments
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
13B	Determination of Total Fluoride Emissions from Stationary Sources - Specific Ion Electrode Method

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 62-204.800, F.A.C.; 40 CFR 60, Appendix A.]

B.33. Common Testing Requirements. Unless otherwise specified, any 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.]

{Permitting Note: Air compliance test notifications can now be completed online in the Department's Business Portal. To access this online process, go to <http://www.fldepportal.com/go/home> and sign in (or register if you're a new user) from the link in the upper right corner of the page. On the Welcome page select the Submit option, then select Registration/Notification, and then click on Air Compliance Test Notifications. Once in the process, just carefully read the instructions on each screen (and under the Help tabs) to complete the notification.}

Recordkeeping and Reporting Requirements

B.34. Recordkeeping & reporting requirements. Each owner or operator subject to the requirements of NESHAP Subpart BB shall comply with the recordkeeping requirements in 40 CFR 63.10 as specified in (1) through (5) of this Specific Condition.

- (1) The Permittee must comply with the general recordkeeping requirements in 40 CFR 63.10(b)(1); and
- (2) As required by 40 CFR 63.10(d), the permittee must report the results of the initial and subsequent performance tests as part of the notification of compliance status required in 40 CFR 63.9(h). The permittee must verify in the performance test reports that the operating limits for each process have not changed or provide documentation of revised operating limits established according to 40 CFR 63.625, as applicable. In the notification of compliance status, the permittee must also:
 - (i) Certify to the Administrator that the permittee have not shipped fresh granular triple superphosphate from an affected facility.
 - (ii) If the permittee elect to demonstrate compliance by following the procedures in 40 CFR 63.625(d)(1)(ii)(B), certify to the Administrator annually that the control devices and processes have not been modified since the date of the performance test from which the permittee obtained the data used to establish the allowable ranges. See Specific Condition **B.23**.
- (3) As required by 40 CFR 63.10(e)(1), the permittee must submit an excess emissions report for any exceedance of an emission or operating parameter limit if the total duration of the exceedances for the reporting period is 1 percent of the total operating time for the reporting period or greater. The report must contain the information specified in 40 CFR 63.10 and paragraph (b)(4) of this Specific Condition. When exceedances of an emission limit or operating parameter have not occurred, the permittee must include such information in the report. The permittee must submit the report semiannually and the report must be delivered or postmarked by the 30th day following the end of the calendar half. If exceedances are reported, the permittee must submit the excess emissions report quarterly until a request to reduce reporting frequency is approved as described in 40 CFR 63.10(e)(3).

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- (4) In the event that an affected unit fails to meet an applicable standard, record and report the following information for each failure:
- (i) The date, time and duration of the failure.
 - (ii) A list of the affected sources or equipment for which a failure occurred.
 - (iii) An estimate of the volume of each regulated pollutant emitted over any emission limit.
 - (iv) A description of the method used to estimate the emissions.
 - (v) A record of actions taken to minimize emissions in accordance with 40 CFR 63.628(b), and any corrective actions taken to return the affected unit to its normal or usual manner of operation.
- (5) The permittee must submit a summary report containing the information specified in 40 CFR 63.10(e)(3)(vi). The permittee must submit the summary report semiannually and the report must be delivered or postmarked by the 30th day following the end of the calendar half.

[40 CFR 63.627(b)]

- B.35. P₂O₅ Daily Equivalent Recordkeeping.** The permittee shall maintain a daily record of equivalent P₂O₅ feed. The equivalent P₂O₅ feed shall be calculated by determining the total mass rate in metric tons per hour of phosphorus bearing feed using the procedures specified in 40 CFR 63.626(f)(3) (see Appendix NESHAP Subpart BB). [40 CFR 63.625(a)(2).]
- B.36. Notification Requirements.** 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 includes the initial and annual performance test reports, excess emissions reports, and the summary report. [40 CFR 63.627.]
- B.37. Wet Scrubber Records.** The permittee shall maintain records on site of the scrubber water flow rate and the pressure drop across the scrubber. In addition, the following vendor design information shall be maintained on site for each wet scrubber: exhaust flow rate; scrubber water flow rate, scrubber pressure drop, dust inlet loading, dust outlet loading and control efficiency. [Rules 62-4.070(1)&(3) and 62-296.340 BART, F.A.C.; and, Permit No. 0470002-055-AC.]
- B.38. On-specification used oil - recordkeeping & reporting.** A certified on-specification used oil analysis of each delivery prior to blending shall be retained (in lieu of testing) and reported as part of the AOR. [Rule 62-210.370(3), F.A.C.]
- B.39. On-specification used oil - reporting.** A lead emissions report shall be submitted by each April 1 as part of the AOR in a table format showing all of data and results required to document that the facility wide Lead emission cap determined via used oil usage, has not been exceeded for the previous calendar year. [Rule 62-210.370(3), F.A.C.]
- B.40. Other Reporting Requirements.** See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

Other Requirements

- B.41. Alternate Monitoring Methods.** The permittee is subject to NESHAP alternate monitoring methods within ASP Request 15-T-AP - Appendix 15-T-AP Alternate Monitoring Parameters 40 CFR 63 Subparts AA and BB dated 04/30/2015 (Attachment B); [40 CFR 63.632(a); and, ASP Request 15-T-AP.]
- B.42. Federal Rule Applicability.** This emission unit is subject to specific requirements of 40 CFR 63, Subpart BB, Appendix A to Subpart BB - Applicability to General Provisions to Subpart BB, and alternative MACT monitoring plan (ASP Request 15-T-AP - Alternate Monitoring Parameters 40 CFR 63 Subparts AA and BB dated 04/30/2015). The owner or operator is responsible for remaining in compliance with any updates made to NESHAP Subpart A or BB. To establish operating parameters for this emissions unit, the owner or operator must comply /and demonstrate with the following:
- a. Must comply with all conditions of ASP Request 15-T-AP,
 - b. Must comply with all applicable requirements of NESHAP Subparts A and BB,

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- c. Specifically notify the department the testing will be for establishing allowable ranges for this emissions unit according to NESHAP Subparts A and BB,
 - d. All tests must be precisely conducted according to the MACT standards and all applicable test methods,
 - e. All tests must clearly demonstrate compliance with all MACT standards and applicable test methods and requirements,
 - f. All tests shall be submitted to the Department in accordance with NESHAP Subparts A and BB,
 - g. Failure to meet any requirements of this condition, NESHAP Subpart A or BB, or the alternate plan will negate use of any new ranges derived from the test.
- [40 CFR 63, Subpart A & Subpart BB; and, ASP Request 15-T-AP.]

B.43. Permit No. 0470002-119-AC - Source Obligation:

- a. At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.
- b. At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by exceeding its projected actual emissions, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.

[Permit No. 0470002-119-AC, Specific Condition 2.8.; and, Rule 62-212.400(12), F.A.C.]

B.44. Permit No. 0470002-119-AC - Actual Emissions Reporting: This permit is based on an analysis that compared baseline actual emissions with projected actual emissions and avoided the requirements of subsection 62-212.400(4) through (12), F.A.C. for several pollutants. Therefore, pursuant to Rule 62-212.300(1)(e), F.A.C., the permittee is subject to the following monitoring, reporting and recordkeeping provisions.

- a. The permittee shall monitor the emissions of any PSD pollutant that the Department identifies could increase as a result of the construction or modification and that is emitted by any emissions unit that could be affected; and, using the most reliable information available, calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of 5 years following resumption of regular operations after the change. **{The change, i.e., this project (Permit No. 0470002-119-AC), was complete on August 16, 2019, therefore the calendar year (CY) in which monitoring starts is 2020, running through CY 2024, i.e., for a period of 5 years.}** Emissions shall be computed in accordance with the provisions in Rule 62-210.370, F.A.C., which are provided in Appendix C of this permit.
- b. The permittee shall report to the Department within 60 days after the end of each calendar year during the 5-year period setting out the unit's annual emissions during the calendar year that preceded submission of the report. The report shall contain the following:
 - 1) The name, address and telephone number of the owner or operator of the major stationary source;
 - 2) The annual emissions calculations pursuant to the provisions of 62-210.370, F.A.C., which are provided in Appendix C of this permit;
 - 3) If the emissions differ from the preconstruction projection, an explanation as to why there is a difference; and
 - 4) Any other information that the owner or operator wishes to include in the report.
- c. The information required to be documented and maintained pursuant to subparagraphs 62-212.300(1)(e)1 and 2, F.A.C., shall be submitted to the Department, which shall make it available for review to the general public.
- d. The permittee shall compute and report annual emissions in accordance with Rule 62-210.370(2), F.A.C.

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Subsection B. Emissions Unit 008

“Y” Train-#1 MAP/DAP Plant

For this project, the permittee shall use the following methods in reporting the actual annual emissions for EU008 “Y”-Train – No. 1 MAP/DAP Plant:

- (1) The permittee shall use the data collected from the required stack tests to determine and report the actual annual emissions of particulate matter (PM) and Fluoride (F). The methodology for calculating PM and F baseline emissions shall be used to calculate the actual annual emissions. The permittee shall follow the stack test methods, test procedures and test frequencies specified in the current Title V air operation permit.

{Permitting Note: Baseline emissions of Fluoride and PM were determined to be 1.6 TPY and 16.8 TPY respectively. The “could have accommodated/demand growth emissions” of Fluoride and PM were determined to be 1.2 TPY and 40.4 TPY respectively. To facilitate reporting the annual emissions, the permittee may use an optional Appendix ET available from the Department.}

[Permit No. 0470002-119-AC, Specific Condition 2.10.; and, Rules 62-212.300(1)(e) and 62-210.370, F.A.C.]

- B.45.** Permit No. 0470002-119-AC - Solid and Liquid Sulfur Content and Input Rate. The solid and liquid sulfur content of the product may vary from 1 to 30 percent sulfur by weight depending on customer requirements. The maximum input rate of sulfur to the process in either solid or liquid form shall not exceed 25 tons per hour and will be supplied by the existing (EU054) Molten Sulfur System. [Permit No. 0470002-119-AC, Specific Condition 3.7.]
- B.46.** Permit No. 0470002-119-AC - Operational Records. The permittee shall maintain in an operational log the following records in either a written or electronic format: the date, time, duration of MAP/DAP production with and without micronutrients, a totalized quantity on an annual basis of (zinc oxide/sulfate) input to the acid tank of this emissions unit; the percent sulfuric acid used and the feed rate of micronutrients while operating in Mode 7, and the feed rate of sulfuric acid and zinc oxide/sulfate while operating in Mode 8. These records are to be reported upon request of the Department. [Permit No. 0470002-119-AC, Specific Condition 3.14.]

NESHAP 40 CFR 63 Requirements

- B.47.** NESHAP 40 CFR 63 Requirements - Subpart A. This emissions unit shall comply with all applicable requirements of 40 CFR 63, Subpart A, General Provisions, which have been adopted by reference in Rule 62-204.800(11)(d)1., F.A.C., except that the Secretary is not the Administrator for purposes of 40 CFR 63.5(e), 40 CFR 63.5(f), 40 CFR 63.6(g), 40 CFR 63.6(h)(9), 40 CFR 63.6(j), 40 CFR 63.13, and 40 CFR 63.14. The applicable 40 CFR 63, Subpart A, General Provisions to which this emissions unit is subject to are found at 40 CFR 63.1 and are included in **Appendix 40 CFR 63 Subpart A**. See Specific Condition **B.23**. [Rule 62-204.800(11)(d)1., F.A.C.]
- B.48.** NESHAP 40 CFR 63 Requirements - Subpart BB. This emissions unit shall comply with all applicable requirements of 40 CFR 63, Subpart BB, National Emission Standards for Hazardous Air Pollutants (NESHAP) for Phosphate Fertilizer Production Plants, which have been adopted by reference in Rule 62-204.800(11)(b)19., F.A.C. The applicable 40 CFR 63, Subpart BB, NESHAP for Phosphate Fertilizer Production Plants to which this emissions unit is subject to are found at 40 CFR 63.620 and are included in **Appendix 40 CFR 63, Subpart BB**. [Rule 62-204.800(11)(b)19., F.A.C.]

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Subsection C. Emissions Unit 010

#1 Storage and Shipping Building

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

EU No.	Brief Description
010	#1 Storage and Shipping Building

Detailed Description:

This EU is the #1 Storage & Shipping building.

Air Pollution Control Systems and Measures:

Particulate matter emissions are controlled by a Buffalo wet scrubber when shipping Monocal, Dical, DAP (Diammonium Phosphate) or MAP (Monoammonium Phosphate).

Stack Parameters:

The stack exhaust gas characteristics are typically as follows: exhaust gas temperature of 90° F; exhaust gas flow rate 99,000 acfm; stack height of 100 ft; and, stack diameter of 6.5 feet.

{Permitting Note: This emissions unit is regulated under Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards; Rule 62-296.340, BART, F.A.C.; and, Rule 62-296.403, Phosphate Processing Fluorides Limits.}

Essential Potential to Emit (PTE) Parameters

- C.1. Permitted Capacity.** The operation rate shall not exceed the maximum 12-monthly rolling average (MRA) hourly rate of 175 tons of product or maximum daily 1-hour average rate of 195 tons of product for each mode and only one mode at a time. The 12-MRA hourly rate maximum shall not be exceeded by the 12-MRA hourly rate calculated by averaging each monthly hourly average with the previous 11 monthly hourly averages. [Rules 62-4.160(2) and 62-210.200, Definitions - Potential to Emit (PTE), F.A.C.; and Permit 0470002-034-AC.]
- C.2. Emissions Unit Testing.** See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]
- C.3. Hours of Operation.** This emissions unit may operate continuously (8,760 hours/year). [Rule 62-210.200, PTE, F.A.C.]
- C.4. Methods of Operation.** The methods of operation for this EU are as follows: storage and shipment of DAP (Diammonium Phosphate), MAP (Monoammonium Phosphate), Monocal or Dical. [Rule 62-213.410, F.A.C.]

Air Pollution Control Systems and Measures

- C.5. Wet Scrubbers.** The wet scrubber controls shall be operated and maintained to effectively control particulate matter emissions from each of the emission points identified above for the regulated emissions unit. [Rules 62-4.070(1)&(3) and 62-296.340, BART, F.A.C.; and, Permit No. 0470002-055-AC.]

Emission Limitations and Standards

Unless otherwise specified, the averaging time(s) for Specific Conditions **C.6. - C.7.** are based on the specified averaging time of the applicable test method.

- C.6. Particulate Matter Emissions.** Particulate matter emissions shall not exceed 4.7 lbs/hr as determined by EPA Method 5. [Rules 62-296.320(4)(a) and 296.340, BART, F.A.C.; and, Permit 0470002-055-AC.]

- C.7. Visible Emissions.** Visible emissions shall not be equal to or greater than 20% opacity. [Rule 62-296.320(4)(b), F.A.C.]

Excess Emissions

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Subsection C. Emissions Unit 010

#1 Storage and Shipping Building

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

- C.8. Excess Emissions Allowed.** Excess emissions resulting from startup, shutdown or malfunction of any emissions unit 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.]
- C.9. 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.]
- C.10. Excess Emissions Notification.** In case of excess emissions resulting from a malfunction, the permittee shall immediately notify the Air Compliance Section of the Northeast District Office of the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(5), F.A.C.]

Monitoring of Operations

- C.11. Wet Scrubber Parameters:** For each scrubber, the permittee shall install, operate and maintain devices to continuously monitor the scrubber water flow rate, the pressure drop across the scrubber and the fan amperage. Such devices shall be calibrated and fully functional. [Rule 62-296.340, BART, F.A.C.; and, Permit No. 0470002-055-AC.]

Test Methods and Procedures

- C.12. Particulate Matter Emissions.** The particulate matter emissions stack test method shall be EPA Method 5, incorporated and adopted by reference in Chapter 62-204.800, F.A.C. and be performed once every calendar year (January 1 - December 31). [Rules 62-296.320(4)(a), 62-204.800, 62-296.340(3)(b)2 and 62-297.310(8)(a)1., F.A.C.; 40 CFR 60, Appendix A; and, Permit No.0470002-055-AC.]

- C.13. Visible Emissions.** ~~The visible emissions test method shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-204.800, F.A.C. and be performed once every calendar year (January 1 - December 31). [Rules 62-296.320(4)(b) and 62-297.310(8)(a)1., F.A.C.]~~

- C.14. Test Methods.** When 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 62-204.800, F.A.C.; and, 40 CFR 60, Appendix A.]

- C.15. Common Testing Requirements.** Unless otherwise specified, any 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.]

{Permitting Note: Air compliance test notifications can now be completed online in the Department's Business Portal. To access this online process, go to <http://www.fldepportal.com/go/home> and sign in (or register if you're a new user) from the link in the upper right corner of the page. On the Welcome page select the Submit option, then select Registration/Notification, and then click on Air Compliance Test Notifications.

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection C. Emissions Unit 010

#1 Storage and Shipping Building

Once in the process, just carefully read the instructions on each screen (and under the Help tabs) to complete the notification.}

- C.16. Parametric data.** Parametric data recorded for the wet scrubber during each test shall be provided with the required test report. [Rules 62-297.310, 62-4.070(1)&(3) and 62-296.340, BART, F.A.C.; and, Permit No. 0470002-055-AC.]

Recordkeeping and Reporting Requirements

- C.17. Wet Scrubber Records.** The permittee shall maintain records on site of the scrubber water flow rate and the pressure drop across the scrubber. In addition, the following vendor design information shall be maintained on site for each wet scrubber: exhaust flow rate; scrubber water flow rate, scrubber pressure drop, dust inlet loading, dust outlet loading and control efficiency. [Rule 62-296.340, BART, F.A.C.; and, Permit No. 0470002-055-AC.]

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

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SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection D. Emissions Unit 015

Granular Product Shipping and Screening Facility

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

EU No.	Brief Description
015	Granular Product Shipping and Screening Facility

Detailed Description:

This EU is the MAP (Monoammonium Phosphate), DAP (Diammonium Phosphate), Monocal or Dical Shipping Facility. The product is transported by front-end loaders from storage piles located in the shipping and screening facility area into hoppers where product is sorted and transported to loading silos for railcar or truck loading.

Air Pollution Control Systems and Measures:

Particulate matter emissions from the shipping and screening facility are controlled by a single cyclone in series with a venturi wet scrubber.

Stack Parameters:

The stack exhaust gas characteristics are typically as follows: exhaust gas temperature of 90° F; exhaust gas flow rate 99,000 acfm; stack height of 100 ft; and, stack diameter of 6.5 feet.

{Permitting Note: This emissions unit is regulated under Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards; Rule 62-296.340, BART, F.A.C.; and, Rule 62-296.403, Phosphate Processing Fluorides Limits.}

Essential Potential to Emit (PTE) Parameters

D.1. Permitted Capacity. The rate shall not exceed the maximum 12-monthly rolling average (MRA) hourly rate of 215 tons of product or maximum daily 1-hour average rate of 240 tons of product for each mode and only one mode at a time. The modes are defined as the operating modes for the Dical Plant (EU 004), MAP/DAP Plants (EUs 008 and 032). The 12-MRA hourly rate maximum shall not be exceeded by the 12-MRA hourly rate calculated by averaging each monthly hourly average with the previous 11 monthly hourly averages. [Rules 62-4.160(2) and 62-210.200, PTE, F.A.C.; and Permit Nos. 0470002-034-AC & 0470002-042-AC.]

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

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

Monitoring of Operations

D.4. Wet Scrubbers. The wet scrubber controls shall be operated and maintained to effectively control particulate matter from each of the emissions points identified above for the regulated emissions unit. [Rules 62-4.070(1)&(3) and 62-296.340, BART, F.A.C.; and, Permit No. 0470002-055-AC.]

D.5. Wet Scrubber Parameters. For each scrubber, the permittee shall install, operate and maintain devices to continuously monitor the scrubber water flow rate, the pressure drop across the scrubber and the fan amperage. Such devices shall be calibrated and fully functional. [Rule 62-296.340, BART, F.A.C.; and, Permit No. 0470002-055-AC.]

Emission Limitations and Standards

Unless otherwise specified, the averaging time(s) for Specific Conditions **D.6. - D.7.** are based on the specified averaging time of the applicable test method.

D.6. Particulate Matter Emissions. Particulate matter emissions shall not exceed 1.46 lbs/hr as determined by EPA Method 5. [Rules 62-296.320(4)(a) and 62-296.340, BART, F.A.C.; and, Permit 0470002-055-AC.]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection D. Emissions Unit 015

Granular Product Shipping and Screening Facility

D.7. Visible Emissions. ~~Visible Emissions shall not be equal to or greater than 20% opacity. [Rule 62-296.320(4)(b)1., F.A.C.]~~

Test Methods and Procedures

D.8. Particulate Matter. The particulate matter emissions stack test method shall be EPA Method 5, incorporated and adopted by reference in Chapter 62-204.800, F.A.C., and be performed once every calendar year (January 1 - December 31). [Rules 62-296.320(4)(a), 62-204.800 and 62-296.340(3)(b)2, F.A.C.; 40 CFR 60, Appendix A; and, Permit No. 0470002-055-AC.]

D.9. Visible Emissions. ~~The visible emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-204.800, F.A.C., and be performed once every calendar year (January 1 - December 31). [Rules 62-296.320(4)(b) and 62-297.310(8)(a), F.A.C.]~~

D.10. Parametric data. Parametric data recorded for the wet scrubber during each test shall be provided with the required test report. [Rules 62-296.340, BART and 62-297.310, F.A.C.; and, Permit No. 0470002-055-AC.]

D.11. Test Methods. When 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 62-204.800, F.A.C.; and, 40 CFR 60, Appendix A.]

D.12. Common Testing Requirements. Unless otherwise specified, any 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.]

{Permitting Note: Air compliance test notifications can now be completed online in the Department's Business Portal. To access this online process, go to <http://www.fldepportal.com/go/home> and sign in (or register if you're a new user) from the link in the upper right corner of the page. On the Welcome page select the Submit option, then select Registration/Notification, and then click on Air Compliance Test Notifications. Once in the process, just carefully read the instructions on each screen (and under the Help tabs) to complete the notification.}

Recordkeeping and Reporting Requirements

D.13. Wet Scrubber Records. The permittee shall maintain records on site of the scrubber water flow rate and the pressure drop across the scrubber. In addition, the following vendor design information shall be maintained on site for each wet scrubber: exhaust flow rate; scrubber water flow rate, scrubber pressure drop, dust inlet loading, dust outlet loading and control efficiency. [Rules 62-4.070(1)&(3) and 62-296.340, BART, F.A.C.]

D.14. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

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SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection E. Emissions Unit 032

“Z”-Train #2 MAP/DAP Plant

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

EU No.	Brief Description
032	“Z”-Train #2 MAP/DAP Plant

Detailed Description:

The “Z” Train-#2 MAP/DAP Plant has an input rate of 45.7 TPH of P_2O_5 feed (daily average) and is capable of producing fertilizer by six different modes.

Air Pollution Control Systems and Measures:

The “Z” Train-#2 MAP/DAP Plant has two emission points (EP). The first EP is the main part of MAP/DAP process which is controlled by several cyclones followed by several cyclonic and venturi scrubbers (referred to as “EP RGD” (reactor, granulator and dryer). The second EP is the cooler (referred to as “EP C”) is controlled by a cyclone and a venturi scrubber.

Stack Parameters:

The stack exhaust gas characteristics of EP RGD are typically as follows: exhaust gas temperature of 120° F; exhaust gas flow rate 96,000 acfm; stack height of 140 ft; and, stack diameter of 8 feet.

{Permitting Note: This emissions unit is regulated under: 40 CFR 63, Subpart BB - NESHAP from Phosphate Fertilizers Production Plants, adopted by reference in Rules 62-204.800(11)(b)19., F.A.C.; and, Rule 62-212.300, F.A.C., General Preconstruction Review Requirements; 62-212.400, F.A.C., Prevention of Significant Deterioration [PSD-FL-083]; Rule 62-296.403, Phosphate Processing Fluorides Limits. Pursuant to 40 CFR 63.631, this unit is exempted from any otherwise applicable NSPS standard contained in 40 CFR 60, Subpart V, Subpart W or Subpart X, as long as the facility has a current Title V air operation permit and this unit remains in compliance with the requirements of 40 CFR 63, Subpart BB.}

Essential Potential to Emit (PTE) Parameters

- E.1. Permitted Capacity.** The P_2O_5 feed shall not exceed 45.7 tons per hour (TPH) daily average and 362,737 tons per year (TPY) P_2O_5 input, 12-month rolling total. [Rules 62-4.160(2) and 62-210.200, PTE, F.A.C.; and, Permit Nos. 0470002-032-AC, 0470002-034-AC, 0470002-079-AC & 0470002-104-AC.]
- E.2. Emissions Unit Testing.** See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]
- E.3. Hours of Operation.** This emissions unit may operate continuously (8,760 hours/year). [Rule 62-210.200, PTE, F.A.C.]
- E.4. Methods of Operation - Products.**
Mode 1 - DAP (Diammonium Phosphate) produced by Split Acid (30% & 50% P_2O_5 input) phosphoric acid.
Mode 2 - MAP (Monoammonium Phosphate) produced by Split Acid (30% & 50% P_2O_5 input) phosphoric acid.
Mode 3 - DAP (Diammonium Phosphate) produced by 40% P_2O_5 input phosphoric acid.
Mode 4 - MAP (Monoammonium Phosphate) produced by 40% P_2O_5 input phosphoric acid.
Mode 5 - MAP produced by reacting ammonia and acid in two pipe reactors. The Z-Train has been modified to allow the producing of granular MAP using a pipe reactor as an alternate to the tank reactor.
Mode 7 - MAP/DAP with the addition of micronutrient sulfur solid/liquid.
[Rule 62-213.410, F.A.C.; Permit No. 0470002-104-AC; and, 0470002-124-AC.]
- E.5. Methods of Operation - Fuels.** Natural gas shall be fired as the primary fuel. Fuel oil with a maximum sulfur content of 1.0% by weight or on-specification used oil with a maximum sulfur content of 1.0% by weight may be fired as backup fuel. [Rules 62-4.070(1)&(3) and 62-296.340, BART, F.A.C.; and, Permit No. 0470002-055-AC.]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection E. Emissions Unit 032

"Z"-Train #2 MAP/DAP Plant

E.6. Methods of Operation - On-specification used oil - firing. On-specification used oil may be fired as follows:

1. At any time provided the maximum concentration of PCBs shall be less than 2 ppm and whether generated on or off-site. The analysis and recordkeeping requirements apply to each amount prior to blending even if to be blended with 90% virgin oil.
2. Only during normal operation temperature and not during startup or shutdown if the maximum concentration of PCBs is ≥ 2 but < 50 ppm.

[Rules 62-213.410, F.A.C.; and, 40 CFR 761.]

Air Pollution Control Systems and Measures

E.7. Wet Scrubbers. The wet scrubber controls shall be operated and maintained to effectively control particulate matter emissions from both of the emission points (EP RGD and EP C))for the regulated emissions unit. [Rules 62-4.070(1)&(3) and 62-296.340, BART, F.A.C.; and, Permit No. 0470002-055-AC.]

E.8. General Best Operational Practices. Best operational practices to minimize leaks of sulfur dioxide and sulfur trioxide, or other fugitive process emissions shall be adhered to and shall include regular inspections and prompt repair or correction of any leaks or other fugitive emissions. [Rules 62-4.070(1)&(3), 213.440(1) and 62-296.320, F.A.C.; and, Permit No. 0470002-055-AC.]

Emission Limitations and Standards

Unless otherwise specified, the averaging time(s) for Specific Conditions **E.9. - E.13.** are based on the specified averaging time of the applicable test method.

All Modes

From EP RGD (reactor, granulator and dryer):

E.9. Total Fluoride Emissions. Total fluoride emissions shall not exceed 30 grams/metric ton of equivalent P_2O_5 feed (0.060 lb/ton), 2.18 lb/hr and 9.50 TPY. [40 CFR 60.222(a); 40 CFR 63.622(a).]

E.10. Sulfur Dioxide.

- a. Sulfur dioxide emissions shall not exceed 11.80 lbs/hr and 51.50 TPY. [Permit No. AC24-56215/ PSD-FL-083.]
- b. The firing of the permitted fuels shall be used to control sulfur dioxide emissions. [Rules 62-4.070(1)&(3) and 62-296.340, BART, F.A.C.; and, Permit Nos. 0470002-055-AC.]

E.11. Visible Emissions. Visible emissions shall not be equal to or greater than 20% opacity. Opacity observations shall be made at the point of greatest opacity in that portion of the plume where condensed water vapor is not present. [Rules 62-296.320(4)(b) and 62-296.340, BART, F.A.C.; ~~40 CFR 60.83(a)2~~ & 40 CFR 60, Appendix A, Method 9; and, Permit No. 0470002-055-AC.]

E.12. Particulate Matter Emissions. Particulate matter emissions shall not exceed 9.2 lbs/hr as determined by EPA Method 5. [Rule 62-296.320(4)(a), F.A.C.; and, Permit 0470002-055-AC.]

E.13. Nitrogen Oxides Emissions. Nitrogen oxides emissions (expressed as NO_2) shall be controlled by the inherent combustion design of the existing unit and the firing of the natural gas as the primary fuel. [Rule 62-070(1)&(3), F.A.C.; and, Permit No. 0470002-055-AC.]

E.14. On-Spec Used Oil - Lead. The lead emissions cap for the facility is 9.4 TPY. The on-specification used oil fired to all units shall not exceed 24,000,000 gallons per year which at 100 ppm yields 9.4 TPY of lead emissions. [Rule 62-070(1)&(3), F.A.C.]

E.15. The on-spec used oil prior to blending shall comply with the limits listed below and shall be recorded:

ON-SPEC USED OIL SPECIFICATIONS	
Constituent/Property	Allowable Level

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection E. Emissions Unit 032

“Z”-Train #2 MAP/DAP Plant

Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Total Halogens	1,000 ppm maximum
Flash Point	100°F minimum

[40 CFR 279.11.]

From EP C (cooler):

E.16. Visible Emissions. Visible emissions from the cooler shall not exceed 20% opacity. Opacity observations shall be made at the point of greatest opacity in that portion of the plume where condensed water vapor is not present. [Rule 62-296.320(4)(b), F.A.C.; Rule 62-296.340, BART, F.A.C.; 40 CFR 60.83(a)2 & 40 CFR 60, Appendix A, Method 9; and, Permit Nos. 0470002-032-AC & 0470002-055-AC.]

Excess Emissions

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

E.17. Excess Emissions Allowed. Excess emissions resulting from startup, shutdown or malfunction of any emissions unit 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.]

E.18. 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(1), F.A.C.]

E.19. Excess Emissions Notification. In case of excess emissions resulting from a malfunction, the permittee shall immediately notify the Air Compliance Section of the Northeast District Office of the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(5), F.A.C.]

Monitoring of Operations

E.20. Phosphorus-bearing material - flow monitoring device. The permittee shall install, calibrate, maintain, and operate a flow monitoring device which can be used to determine the mass flow of phosphorus-bearing feed material to the process. The flow monitoring device shall have an accuracy of ± 5 percent over its operating range. [40 CFR 60.223(a).]

E.21. Phosphorus-bearing material - continuous monitoring system. The permittee shall install, calibrate, maintain, and operate a continuous monitoring system (CMS) according to your site-specific monitoring plan specified in 40 CFR 63.628(c). The CMS must have an accuracy of ± 5 percent over its operating range and must determine and permanently record the mass flow of phosphorus-bearing material fed to the process. [40 CFR 63.625(a)(1).]

E.22. P₂O₅ Feed. The permittee shall maintain a daily record of equivalent P₂O₅ feed. [40 CFR 60.223(b).]

E.23. Scrubber Pressure Drop. The permittee shall install, calibrate, maintain, and operate a monitoring device which continuously measures and permanently records the total pressure drop across the scrubbing system. The monitoring device shall have an accuracy of ± 5 percent over its operating range; or comply with the terms of an approved alternate monitoring plan (AMP). [40 CFR 60.223(c)]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection E. Emissions Unit 032

"Z"-Train #2 MAP/DAP Plant

E.24. Scrubber Pressure Drop and Liquid Flow Rate. The facility must install a continuous parameter monitoring system (CPMS) and comply with the requirements specified in (1) through (3) of this Specific Condition.

- (1) The Permittee must monitor the operating parameter(s) applicable to the control device that the Permittee use as specified in Table 3 to NESHAP Subpart BB and establish the applicable limit or range for the operating parameter limit as specified in (1)(i) and (ii) of this Specific Condition, as applicable.
 - (i) Except as specified in (1)(ii) of this Specific Condition, determine the value(s) as the arithmetic average of operating parameter measurements recorded during the three test runs conducted for the most recent performance test.
 - (ii) If the Permittee use an absorber to comply with the emission limits in Table 1 or 2 to NESHAP Subpart BB and the Permittee monitor pressure drop across the absorber, the Permittee must establish allowable ranges using the methodology specified in (1)(ii)(A) and (B) of this Specific Condition.
 - (A) The allowable range for the daily averages of the pressure drop across an absorber and of the flow rate of the absorber liquid to each absorber in the process absorbing system is ± 20 percent of the baseline average value determined in (1)(i) of this Specific Condition. 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. However, the adjustment must not be reduced to less than ± 10 percent under any instance.
 - (B) As an alternative to (1)(ii)(A) of this Specific Condition, the Permittee may establish allowable ranges for the daily averages of the pressure drop across an absorber for the purpose of assuring compliance with NESHAP Subpart BB using the procedures described in this Specific Condition. The Permittee must establish the allowable ranges based on the baseline average values recorded during previous performance tests or the results of performance tests conducted specifically for the purposes of this paragraph. The Permittee must conduct all performance tests using the methods specified in 40 CFR 63.626. The Permittee must certify that the control devices and processes have not been modified since the date of the performance test from which the Permittee obtained the data used to establish the allowable ranges. When a source using the methodology of this Specific Condition is retested, the Permittee must determine new allowable ranges of baseline average values unless the retest indicates no change in the operating parameters outside the previously established ranges. Alternatively, the Permittee may comply with the terms of an approved AMP.
 - (2) The Permittee must monitor, record, and demonstrate continuous compliance using the minimum frequencies specified in Table 4.
 - (3) The Permittee must comply with the calibration and quality control requirements that are applicable to the operating parameter(s) the Permittee monitor as specified in Table 5.
- [40 CFR 63.625(d)(1)-(3).]

E.25. Maintaining Allowable Range of Scrubber Operation Parameters. 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(d)(1). [40 CFR 63.625.]

E.26. Pollution Control Equipment. Only the secondary scrubbers using recirculated water from the Granulation Pond may be considered pollution control equipment. In accordance with 40 CFR 63, Subpart BB (HF MACT) requirements, the scrubber liquid flow and pressure drop will be monitored continuously on the secondary scrubbers. These scrubbers are venturi scrubbers followed by cyclonic separators, and possibly a tail gas scrubber, if needed. The pressure drop across these scrubbing systems typically exceeds 5 inches of water column. [Permit No. 0470002-104-AC.]

E.27. Gas Scrubbers Pressure Drop. The secondary gas scrubbers pressure drop shall be measured and reported based on the entire scrubber measurements and not separated by sections. [Rule 62-070(1)&(3), F.A.C.]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection E. Emissions Unit 032

“Z”-Train #2 MAP/DAP Plant

E.28. Wet Scrubber Parameters. For each wet scrubber, the permittee shall install, operate and maintain devices to continuously monitor the scrubber water flow rate, the pressure drop across the scrubber and the fan amperage. Such devices shall be calibrated, fully functional and in operation before conducting the initial compliance tests. The scrubber parameters shall be continuously monitored and manually recorded at least once during each eight-hour block of operation. Alternatively, the parametric data may be continuously recorded. During each required compliance test, such data shall be recorded at 15-minute intervals. [Rules 62-4.070(1)(3) and 62-296.340, BART, F.A.C.; and, Permit No. 0470002-055-AC & 0470002-104-AC.]

Test Methods and Procedures

All Modes

From EP RGD (reactor, granulator and dryer):

E.29. Sulfur Dioxide. In lieu of stack testing, the permittee shall comply with the applicable requirements in Rule 62-297.440(1), F.A.C. or maintain a record of acceptable, certified analyses of all fuel oil fired and report annually by April 1 of each year. [Rule 62-297.440(1), F.A.C.]

E.30. Total Fluorides. The test method for total fluorides shall be EPA Method 13A or EPA Method 13B, incorporated and adopted by reference in Chapter 62-204.800, F.A.C. The minimum sample volume shall be 30 dry standard cubic feet. Test procedures shall meet all applicable requirements of Chapter 62-204.800, F.A.C. [Rule 62-296.403(3), F.A.C.]

{Permitting Note: Total fluorides testing is not applicable to the cooler (EP C), because it is not a source of fluorides.}

E.31. Visible Emissions. The visible emissions test method shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-204.800, F.A.C. and be performed once every calendar year (January 1 - December 31). Opacity observations shall be made at the point of greatest opacity in that portion of the plume where condensed water vapor is not present. [Rules 62-296.320(4)(b), 62-296.340, BART, 62-297.310(7)(b) and 62-297.310(8)(a)1.a., F.A.C.]

E.32. Particulate Matter. The particulate matter emissions stack test method shall be EPA Method 5, incorporated and adopted by reference in Chapter 62-204.800, F.A.C. and be performed once every calendar year (January 1 - December 31). [Rules 62-296.320(4)(a), 62-204.800 and 62-297.310(8)(a)1., F.A.C.; 40 CFR 60, Appendix A; and, Permit No. 0470002-055-AC.]

E.33. Parametric data. Parametric data recorded for the wet scrubber during each test shall be provided with the required test report. As necessary, EPA Methods 1-4 shall be conducted to support the other test methods. [Rules 62-297.310(10), 62-4.070(1)&(3) and 62-296.340, BART, F.A.C.; and, Permit No. 0470002-055-AC.]

E.34. Operating limit. The permittee must comply with the notification requirements specified in 40 CFR 63.9. During the most recent performance test, if the permittee demonstrate compliance with the emission limit while operating your control device outside the previously established operating limit, the permittee must establish a new operating limit based on that most recent performance test and notify the Administrator that the operating limit changed based on data collected during the most recent performance test. When a source is retested and the performance test results are submitted to the Administrator pursuant to 40 CFR 63.7(g)(1), or 40 CFR 63.10(d)(2), the permittee must indicate whether the operating limit is based on the new performance test or the previously established limit. Upon establishment of a new operating limit, the permittee must thereafter operate under the new operating limit. If the Administrator determines that the permittee did not conduct the compliance test in accordance with the applicable requirements or that the operating limit established during the performance test does not correspond to representative (normal) conditions, the permittee must conduct a new performance test and establish a new operating limit. [40 CFR 63.627(a)]

From EP C (cooler):

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection E. Emissions Unit 032

“Z”-Train #2 MAP/DAP Plant

E.35. Visible Emissions. The visible emissions test method shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-204.800, F.A.C. and be performed once every calendar year (January 1 - December 31). Opacity observations shall be made at the point of greatest opacity in that portion of the plume where condensed water vapor is not present. [Rules 62-296.320(4)(b), 62-296.340, BART, 62-297.310(7)(b) and 62-297.310(8)(a)1.a., F.A.C.]

E.36. Test Methods. When 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
13B	Determination of Total Fluoride Emissions from Stationary Sources - Specific Ion Electrode Method

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 62-204.800, F.A.C.; 40 CFR 60, Appendix A.]

[Permitting Note: During opacity testing, Rule 62-297.310(3)(b), F.A.C does not apply. Rule 62-297.310(5)(b), F.A.C. shall apply during opacity test observation period. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. See Appendix TR, Conditions TR.2 and TR.4.]

E.37. Common Testing Requirements. Unless otherwise specified, any 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.]

{Permitting Note: Air compliance test notifications can now be completed online in the Department's Business Portal. To access this online process, go to <http://www.fldepportal.com/go/home> and sign in (or register if you're a new user) from the link in the upper right corner of the page. On the Welcome page select the Submit option, then select Registration/Notification, and then click on Air Compliance Test Notifications. Once in the process, just carefully read the instructions on each screen (and under the Help tabs) to complete the notification.}

Recordkeeping and Reporting Requirements

E.38. Recordkeeping & reporting requirements. Each owner or operator subject to the requirements of NESHAP Subpart BB shall comply with the recordkeeping requirements in 40 CFR 63.10 as specified in (1) through (5) of this Specific Condition.

- (1) The Permittee must comply with the general recordkeeping requirements in 40 CFR 63.10(b)(1); and
- (2) As required by 40 CFR 63.10(d), the permittee must report the results of the initial and subsequent performance tests as part of the notification of compliance status required in 40 CFR 63.9(h). The permittee must verify in the performance test reports that the operating limits for each process have not changed or provide documentation of revised operating limits established according to 40 CFR 63.625, as applicable. In the notification of compliance status, the permittee must also:
 - (i) Certify to the Administrator that the permittee have not shipped fresh granular triple superphosphate from an affected facility.

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Subsection E. Emissions Unit 032

“Z”-Train #2 MAP/DAP Plant

- (ii) If the permittee elect to demonstrate compliance by following the procedures in 40 CFR 63.625(d)(1)(ii)(B), certify to the Administrator annually that the control devices and processes have not been modified since the date of the performance test from which the permittee obtained the data used to establish the allowable ranges.
- (3) As required by 40 CFR 63.10(e)(1), the permittee must submit an excess emissions report for any exceedance of an emission or operating parameter limit if the total duration of the exceedances for the reporting period is 1 percent of the total operating time for the reporting period or greater. The report must contain the information specified in 40 CFR 63.10 and paragraph (b)(4) of this Specific Condition. When exceedances of an emission limit or operating parameter have not occurred, the permittee must include such information in the report. The permittee must submit the report semiannually and the report must be delivered or postmarked by the 30th day following the end of the calendar half. If exceedances are reported, the permittee must submit the excess emissions report quarterly until a request to reduce reporting frequency is approved as described in 40 CFR 63.10(e)(3).
- (4) In the event that an affected unit fails to meet an applicable standard, record and report the following information for each failure:
 - (i) The date, time and duration of the failure.
 - (ii) A list of the affected sources or equipment for which a failure occurred.
 - (iii) An estimate of the volume of each regulated pollutant emitted over any emission limit.
 - (iv) A description of the method used to estimate the emissions.
 - (v) A record of actions taken to minimize emissions in accordance with 40 CFR 63.628(b), and any corrective actions taken to return the affected unit to its normal or usual manner of operation.
- (5) The permittee must submit a summary report containing the information specified in 40 CFR 63.10(e)(3)(vi). The permittee must submit the summary report semiannually and the report must be delivered or postmarked by the 30th day following the end of the calendar half.

[40 CFR 63.627(b)]

- E.39. P₂O₅ Daily Equivalent Recordkeeping.** The permittee shall maintain a daily record of equivalent P₂O₅ feed. The equivalent P₂O₅ feed shall be calculated by determining the total mass rate in metric tons per hour of phosphorus bearing feed using the procedures specified in 40 CFR 63.626(f)(3) (see Appendix NESHAP Subpart BB). [40 CFR 63.625(a)(2).]
- E.40. Notification Requirements.** 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 includes the initial and annual performance test reports, excess emissions reports, and the summary report. [40 CFR 63.627.]
- E.41. Wet Scrubber Records.** The permittee shall maintain records on site of the scrubber water flow rate and the pressure drop across the scrubber. In addition, the following vendor design information shall be maintained on site for each wet scrubber: exhaust flow rate; scrubber water flow rate, scrubber pressure drop, dust inlet loading, dust outlet loading and control efficiency. [Rules 62-4.070(1)&(3) and 62-296.340 BART, F.A.C.; and, Permit No. 0470002-055-AC.]
- E.42. On-specification used oil - recordkeeping & reporting.** A certified on-specification used oil analysis of each delivery prior to blending shall be retained (in lieu of testing) and reported as part of the AOR. [Rule 62-210.370(3), F.A.C.]
- E.43. On-specification used oil - reporting.** A lead emissions report shall be submitted by each April 1 as part of the AOR in a table format showing all of data and results required to document that the Lead CAP via used oil gallons usage has not been exceeded for the previous calendar year. [Rule 62-210.370(3), F.A.C.]
- E.44. Operational Records - Mode 7.** The permittee shall maintain in an operational log the following records in either a written or electronic format: The date, time, duration of production with and without

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“Z”-Train #2 MAP/DAP Plant

micronutrients, and the feed rate of elemental sulfur while operating in Mode 7. These records are to be reported upon request of the Department. [Permit No. 0470002-104-AC and Permit No. 0470002-124-AC.]

E.45. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

Other Requirements

E.46. Alternate Monitoring Methods. The permittee is subject to NESHAP alternate monitoring methods within ASP Request 15-T-AP - Appendix 15-T-AP Alternate Monitoring Parameters 40 CFR 63 Subpart AA and BB dated 04/30/2015 (Attachment B); [40 CFR 63.632(a); and, ASP Request 15-T-AP.]

E.47. Federal Rule Applicability. This emission unit is subject to specific requirements of 40 CFR 63, Subpart BB, Appendix A to Subpart BB - Applicability to General Provisions to NESHAP Subpart BB, and alternative MACT monitoring plan (ASP Request 15-T-AP - Alternate Monitoring Parameters 40 CFR 63 Subpart AA and BB dated 04/30/2015). The owner or operator is responsible for remaining in compliance with any updates made to NESHAP Subpart A or BB. To establish operating parameters for this emissions unit, the owner or operator must comply /and demonstrate with the following:

- a. Must comply with all conditions of ASP Request 15-T-AP,
- b. Must comply with all applicable requirements of NESHAP Subparts A and BB,
- c. Specifically notify the department the testing will be for establishing allowable ranges for this emissions unit according to NESHAP Subparts A and BB,
- d. All tests must be precisely conducted according to the MACT standards and all applicable test methods,
- e. All tests must clearly demonstrate compliance with all MACT standards and applicable test methods and requirements,
- f. All tests shall be submitted to the Department in accordance with NESHAP Subparts A and BB,
- g. Failure to meet any requirements of this condition, NESHAP Subpart A or BB, or the alternate plan will negate use of any new ranges derived from the test.

[40 CFR 63, Subpart A & Subpart BB; and, ASP Request 15-T-AP.]

NESHAP 40 CFR 63 Requirements

E.48. NESHAP 40 CFR 63 Requirements - Subpart A. This emissions unit shall comply with all applicable requirements of 40 CFR 63, Subpart A, General Provisions, which have been adopted by reference in Rule 62-204.800(11)(d)1., F.A.C., except that the Secretary is not the Administrator for purposes of 40 CFR 63.5(e), 40 CFR 63.5(f), 40 CFR 63.6(g), 40 CFR 63.6(h)(9), 40 CFR 63.6(j), 40 CFR 63.13, and 40 CFR 63.14. The applicable 40 CFR 63, Subpart A, General Provisions to which this emissions unit is subject to are found at 40 CFR 63.1 and are included in **Appendix 40 CFR 63 Subpart A**. [Rule 62-204.800(11)(d)1., F.A.C.]

E.49. NESHAP 40 CFR 63 Requirements - Subpart BB. This emissions unit shall comply with all applicable requirements of 40 CFR 63, Subpart BB, National Emission Standards for Hazardous Air Pollutants (NESHAP) for Phosphate Fertilizer Production Plants, which have been adopted by reference in Rule 62-204.800(11)(b)19., F.A.C. The applicable 40 CFR 63, Subpart BB, NESHAP for Phosphate Fertilizer Production Plants to which this emissions unit is subject to are found at 40 CFR 63.620 and are included in **Appendix 40 CFR 63, Subpart BB**. [Rule 62-204.800(11)(b)19., F.A.C.]

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Subsection F. Emissions Unit 054

Suwannee River Chemical Complex (SRCC) Molten Sulfur System

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

EU No.	Brief Description
054	Suwannee River Chemical Complex (SRCC) Molten Sulfur System

Detailed Description:

The Suwannee River Chemical Complex Molten Sulfur System consists of a rail & truck unloading system with transfer point venting, a receiving pit, a supply pit, and a storage tank. This EU supplies sulfur in solid or liquid form to EUs 008 "Y" Train-#1 MAP/DAP Plant and 032 "Z" Train-#2 MAP/DAP Plant.

Air Pollution Control Systems and Measures:

This EU has no control equipment.

{Permitting note(s): This emissions unit is regulated under Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards; and, Rule 62-296.340, BART, F.A.C.}

Essential Potential to Emit (PTE) Parameters

- F.1. Permitted Capacity.** The rate shall not exceed the maximum 12-monthly rolling average (MRA) hourly rate of 77.08 tons of throughput or a maximum daily 1-hour average rate of 85 tons throughput. The 12-MRA hourly rate maximum shall not be exceeded by the 12-MRA hourly rate calculated by averaging each monthly hourly average with the previous 11 monthly hourly averages. The throughput rate corresponds to the sulfur feed rate to the sulfuric acid plants. [Rules 62-4.160(2) and 62-210.200, PTE, F.A.C.; and, Permit 0470002-034-AC.]
- F.2. Hours of Operation.** This emissions unit may operate continuously (8,760 hours/year). [Rule 62-210.200, PTE, F.A.C.]

Emission Limitations and Standards

- F.3. VE Standard.** As determined by EPA Method 9, visible emissions from any emissions point in the molten sulfur facility shall not exceed 20% opacity (6 minute average). [Rule 62-296.340, BART, F.A.C.; and, Permit No. 0470002-055 AC.]
- F.4. Molten Sulfur Facilities - Work Practice Standards.** All molten sulfur facilities shall employ, as a minimum, the following practices to minimize the emission of sulfur particulate matter into the atmosphere.
- All molten sulfur transfer shall be through enclosed piping systems where feasible and practical. In user facilities, molten sulfur may be transferred by covered trench or a movable spout which is positioned over a receiving pit. Contact surfaces between movable unloading arms and stationary pipes shall seat effectively around the entire circumference to minimize spillage.
 - All areas surrounding points where molten sulfur pipes are routinely disconnected and areas where molten sulfur is transferred to trucks or railcars shall be paved and curbed within 20 feet of the point of disconnection or transfer to contain any spilled molten sulfur, or shall be provided with non-corrodible drip pans or other secondary containment, positioned to collect spills, that are adequate to contain amounts of sulfur that may escape during routine disconnection, reconnection or operation of the piping system.
 - All spilled molten sulfur shall be collected and properly disposed of whenever the containment area is filled to one-half its containment capacity, or monthly, whichever is more frequent. Spills of molten sulfur outside of a containment area, or where subject to vehicular traffic, shall be collected and disposed of as soon as possible, but no later than 24 hours after the spill occurs. Drip pans or other secondary containment shall be cleaned as needed to prevent exceedance of capacity, but at least weekly.
 - All vent surfaces shall be cleaned monthly to remove captured particles.
 - All owners and operators of molten sulfur storage and handling facilities shall maintain records of spills outside of containment areas and of collection and disposal of spilled sulfur. Such records shall be

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection F. Emissions Unit 054

Suwannee River Chemical Complex (SRCC) Molten Sulfur System

retained for a minimum of two years and shall be available for inspection by the Department upon request.

- f. Owners and operators shall establish and implement procedures to minimize spills from any movable loading arm or pipe upon disconnection, reconnection or operation.

[Rules 62-296.340, BART, F.A.C.; and, Permit No. 0470002-055-AC.]

Excess Emissions

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

- F.5. Excess Emissions Allowed.** Excess emissions resulting from startup, shutdown or malfunction of any emissions unit 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.]
- F.6. 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.]
- F.7. Excess Emissions Notification.** In case of excess emissions resulting from a malfunction, the permittee shall immediately notify the Compliance Assurance Program (CAP) of the Northeast District Office of the Department of Environmental Protection in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]

Test Methods and Procedures

- F.8. VE Testing.** The visible emissions test method shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-204.800, F.A.C. and shall be conducted every 5 years (prior to operation permit renewal.). [Rule 62-296.340, BART, F.A.C.; and, Permit No. 0470002-055-AC.]

- F.9. Test Methods.** When required, tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
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 62-204.800, F.A.C.; and, 40 CFR 60, Appendix A.]

- F.10. Common Testing Requirements.** Unless otherwise specified, any 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.]

{Permitting Note: Air compliance test notifications can now be completed online in the Department's Business Portal. To access this online process, go to <http://www.fldepportal.com/go/home> and sign in (or register if you're a new user) from the link in the upper right corner of the page. On the Welcome page select the Submit option, then select Registration/Notification, and then click on Air Compliance Test Notifications. Once in the process, just carefully read the instructions on each screen (and under the Help tabs) to complete the notification.}

Recordkeeping and Reporting Requirements

- F.11. Other Reporting Requirements.** See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection F. Emissions Unit 054

Suwannee River Chemical Complex (SRCC) Molten Sulfur System

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Proposed

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection G. Emissions Unit 061

Green Superphosphoric Acid Plant

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

EU No.	Brief Description
061	Green Superphosphoric Acid Plant

Detailed Description:

This EU is the Green Superphosphoric Acid (SPA) Plant.

Air Pollution Control Systems and Measures:

The Green Superphosphoric Acid (SPA) Plant emits fluorides that are controlled by a cross-flow packed wet scrubber. This process changes the color of hot SPA from black to green using an oxidant.

Stack Parameters:

The stack exhaust gas characteristics are typically as follows: exhaust gas temperature of 80° F; exhaust gas flow rate 43, 800 acfm; stack height of 65 ft; and, stack diameter of 1.5 feet.

{Permitting Notes: This emission unit is regulated under: NESHAP 40 CFR 63, Subpart AA - NESHAP From Phosphoric Acid Manufacturing Plants, adopted and incorporated by reference in Rule 62-204.800, F.A.C.; and, Rule 62-296.403, F.A.C., Phosphate Processing. Because compliance has been demonstrated with NESHAP 40 CFR 63, Subpart AA, this emissions unit is exempted from the requirements of NSPS, 40 CFR 60, Subpart U. Permit No. 0470002-088-AC allowed the relocation of EU 061, Green Superphosphoric Acid Plant (SPA), from the Suwannee River Chemical site to the Swift Creek Chemical site within the same existing Title V facility.}

Essential Potential to Emit (PTE) Parameters

G.1. Permitted Capacity. The rate shall not exceed the maximum 12-monthly rolling average (MRA) hourly rate of 40 tons of 100% P₂O₅ input or maximum daily 1-Hour average rate of 44.0 tons of 100% P₂O₅ input. The 12-MRA hourly rate maximum shall not be exceeded by the 12-MRA hourly rate calculated by averaging each monthly hourly average with the previous 11 monthly hourly averages. [Rules 62-4.160(2) and 62-210.200, PTE, F.A.C.; and, Permit Nos. 0470002-034-AC & 0470002-054-AC.]

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

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

Emission Limitations and Standards

Unless otherwise specified, the averaging time(s) for Specific Conditions **G.4. - G.5.** are based on the specified averaging time of the applicable test method.

G.4. Total Fluorides. Fluoride emissions shall not exceed 0.0087 lb/ton of equivalent P₂O₅; 0.5 lb/hr and 2.2 TPY. [40 CFR 60.212(a), 40 CFR 63.601 & 40 CFR 63.602(a)(1); Permit Nos. AC24-205170 & 0470002-054-AC.]

G.5. Visible Emissions. Visible emissions shall not be equal to or greater than 20% opacity. [Rule 62-296.320(4)(b), F.A.C.]

Excess Emissions

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

G.6. Excess Emissions Allowed. Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted provided that best operational practices to minimize emissions are adhered

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection G. Emissions Unit 061

Green Superphosphoric Acid Plant

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.]

G.7. 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.]

G.8. Excess Emissions Notification. In case of excess emissions resulting from a malfunction, the permittee shall immediately notify the Air Compliance Section of the Northeast District Office of the Department of Environmental Protection in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]

Monitoring of Operations

G.9. Phosphorus-bearing feed material. The permittee shall install, calibrate, maintain, and operate a continuous monitoring system (CMS) according to your site-specific monitoring plan specified in 40 CFR 63.608(c), which can be used to determine and permanently record the mass flow of phosphorus-bearing feed material to the process. The continuous monitoring system (CMS) must have an accuracy of ± 5 percent over its operating range. [40 CFR 60.213(a) and 40 CFR 63.605(a)(1) & (2).]

G.10. P₂O₅ Feed. The permittee shall maintain a daily record of equivalent P₂O₅ feed by first determining the total mass rate in Mg/hr of phosphorus-bearing feed using a flow monitoring device meeting the requirements of 40 CFR 60.213(a), and then by proceeding according to 40 CFR 60.214(b)(3). [40 CFR 60.213(b).]

G.11. Scrubber Pressure Drop. The permittee shall install, calibrate, maintain, and operate a monitoring system which continuously measures and permanently records the pressure drop across each scrubber in the process scrubbing system in 15-minute block averages. The monitoring system shall be certified by the manufacturer to have an accuracy of ± 5 percent over its operating range. Alternatively, comply with the terms of an approved AMP. [40 CFR 60.213(c).]

G.12. Scrubber Monitoring Systems. 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 $\pm 5\%$ over its operating range.
- c. Fan Amperage. A monitoring system that continuously monitor fan amperage for each fan in the scrubbing system.
- d. Liquid-to-gas Ratio, as applicable.
 - a. A "liquid" 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 $\pm 5\%$ over its operating range.
 - b. A "gas" monitoring system as outlined in Table 3 of Subpart AA of Part 63 - Monitoring Equipment Operating Parameters which permanently records the flow rate of the scrubbing gas to each applicable scrubber in the process scrubbing system in 15-minute block averages.

[40 CFR 63.625(d); and, ASP Request 15-T-AP.]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection G. Emissions Unit 061

Green Superphosphoric Acid Plant

G.13. Scrubber Operating Parameters. In order to provide reasonable assurance that the fluoride emission limitation is being met, the permittee shall create and keep a record log of the scrubber operating parameters for each plant. The record log shall contain, at a minimum:

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

A log entry shall be made at least once for every shift (12 hours) that the Phosphoric Acid Plant operates.

[Rules 62-4.070(1)&(3), 62-4.160(14)(b)&(c), and 62-213.440(b)2.b., F.A.C.]

{Permitting Note: The permittee may substitute continuous monitoring and strip chart recordings for the manual recordkeeping required by this specific condition.}

Test Methods and Procedures

G.14. Fluorides Testing. The permittee shall meet the 40 CFR 63 Subpart AA performance testing requirements stated in 40 CFR 63.606.

{Permitting Note: The facility requested yearly testing in lieu of the every five years due to compliance related issues.}

[40 CFR 60.214, NSPS Subpart U; and Applicant Request dated October 29, 2015.]

G.15. Annual Compliance Tests Required. During each calendar year (January 1st to December 31st), emissions from the scrubber shall be tested to demonstrate compliance with the emissions standards for fluoride. [Rule 62-297.310(8), F.A.C; and, 40 CFR 63.606(b).]

G.16. Test Methods. When 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
13A	Determination of Total Fluoride Emissions from Stationary Sources - SPADNS Zirconium Lake Method
13B	Determination of Total Fluoride Emissions from Stationary Sources - Specific Ion Electrode Method

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 62-204.800, F.A.C.; and, 40 CFR 60, Appendix A.]

G.17. Common Testing Requirements. Unless otherwise specified, any 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.]

{Permitting Note: Air compliance test notifications can now be completed online in the Department's Business Portal. To access this online process, go to <http://www.fldepportal.com/go/home> and sign in (or register if you're a new user) from the link in the upper right corner of the page. On the Welcome page select the Submit option, then select Registration/Notification, and then click on Air Compliance Test Notifications. Once in the process, just carefully read the instructions on each screen (and under the Help tabs) to complete the notification.}

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection G. Emissions Unit 061

Green Superphosphoric Acid Plant

G.18. Additional Compliance Test Requirements. The following scrubber operating parameters shall be monitored and recorded during the compliance test and a summary of this data shall be included with the fluoride emissions test report:

- a. the water flow rate (gallons per minute);
- b. the scrubber pressure drop (inches of water); and
- c. the "equivalent P_2O_5 feed" rate.

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

[Rules 62-4.070(1)&(3), 62-4.160(14)(b), and 62-4.160(14)(c), F.A.C.]

Recordkeeping and Reporting Requirements

G.19. Daily Record. The permittee shall maintain a daily record of the equivalent P_2O_5 feed rate for the phosphoric acid plant according to the procedure specified in 40 CFR 60.203(b) - *Monitoring of Operations* and the following recordkeeping procedure:

- a. Facility Name, Facility ID No. (0470002), Emission Unit ID No. (E.U. 070) and Description;
- b. Date;
- c. Total hours of operation;
- d. Total equivalent P_2O_5 input, tons; and
- e. Equivalent P_2O_5 feed rate, tons P_2O_5 per hour.

Daily records shall be completed within 5 business days.

[Rule 62-4.070(1)&(3) F.A.C.; and, 40 CFR 60.213.]

G.20. Downtime Reporting Requirements. The monitoring devices required for the equivalent P_2O_5 feed rate and the total pressure drop measurement across the scrubber are considered inoperative when they are out-of-service or fail to produce valid data. Upon the occurrence of 48 consecutive hours of continuous monitoring system downtime, the permittee shall notify the Air Compliance Section, Northeast District Office of the Department by 5:00 p.m., or on the Department's next business day, of the incident and specify the corrective action being pursued. [Rule 62-4.130, F.A.C.]

G.21. Method of Calculating P_2O_5 Feed Rate. 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(f). [Rule 62-213.440(1)(b), F.A.C.; and, 40 CFR 63.605(b)(1).]

G.22. Notification Requirements. 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 includes the initial and annual performance test reports, excess emissions reports, and the summary report. [40 CFR 63.607.]

G.23. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

Other Requirements

G.24. Alternate Monitoring Methods. The permittee is subject to NESHAP alternate monitoring methods within ASP Request 15-T-AP - Alternate Monitoring Plan to that Required by 40 CFR 63 Subparts AA and BB dated 04/30/2015 (Attachment B); [40 CFR 63.632(a), ASP Request 15-T-AP.]

G.25. Determining Allowable Range of Scrubber Operation Parameters. 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 NESHAP Subpart AA must establish allowable ranges for operating parameters using the methodology of either paragraph (d)(1) or (2) of this section:

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Subsection G. Emissions Unit 061

Green Superphosphoric Acid Plant

- (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(d) or (g). The Administrator retains the right to reduce the + 20 percent adjustment to the baseline average values of operating ranges in those instances where performance test results indicate that a source's level of emissions is near the value of an applicable emissions standard, but, in no instance shall the adjustment be reduced to less than + 10 percent. The owner or operator must notify the Administrator of the baseline average value and must notify the Administrator each time that the baseline value is changed as a result of the most recent performance test. The baseline average values used for compliance shall be based on the values determined during the most recent performance test. The new baseline average value shall be effective on the date following the performance test.
- (2) The owner or operator of any new or existing affected source shall establish, and provide to the Administrator for approval, allowable ranges of baseline average values for the pressure drop across and of the flow rate of the scrubbing liquid to each scrubber in the process scrubbing system for the purpose of assuring compliance with NESHAP Subpart AA. Allowable ranges may be based upon baseline average values recorded during previous performance tests using the test methods required in NESHAP Subpart AA and established in the manner required in § 63.606(d) or (g). As an alternative, the owner or operator can establish the allowable ranges of baseline average values using the results of performance tests conducted specifically for the purposes of this paragraph using the test methods required in NESHAP Subpart AA and established in the manner required in § 63.606(d) or (g). The source shall certify that the control devices and processes have not been modified subsequent to the testing upon which the data used to establish the allowable ranges were obtained. The allowable ranges of baseline average values developed pursuant to the provisions of this paragraph must be submitted to the Administrator for approval. The owner or operator must request and obtain approval of the Administrator for changes to the allowable ranges of baseline values. When a source using the methodology of this paragraph is retested, the owner operator shall determine new allowable ranges of baseline average values unless the retest indicates no change in the operating parameters from previous tests. Any new allowable ranges of baseline average values resulting from the most recent performance test shall be effective on the date following the retest. Until changes to allowable ranges of baseline average values are approved by the Administrator, the allowable ranges for use in § 63.604 shall be based upon the range of baseline average values proposed for approval.

[40 CFR 63.605(d).]

- G.26. Maintaining Allowable Range of Scrubber Operation Parameters.** The permittee shall maintain daily averages of the pressure drop across each scrubber and of the flow rate of the scrubbing liquid to each scrubber within the allowable ranges established pursuant to 40 CFR 63.605(d)(1) or (2). [40 CFR 63.605.]
- G.27. Monitoring Scrubber Operation.** To comply with § 63.605(d)(1) or (2), the owner or operator shall use the monitoring systems in § 63.605(c) to determine the average pressure loss of the gas stream across each scrubber in the process scrubbing system and to determine the average flow rate of the scrubber liquid to each scrubber in the process scrubbing system during each of the total fluoride runs. The arithmetic averages of the three runs shall be used as the baseline average values for the purposes of § 63.605(d)(1) or (2). [40 CFR 63.606(d).]
- G.28. Determination of Total Fluoride Emissions.** The permittee shall determine compliance with the total fluorides standard as required in 40 CFR 63.606(d), based on the equivalent P_2O_5 computed as indicated in 40 CFR 63.606(d)(3). [40 CFR 63.606(d).]
- G.29. Federal Rule Applicability.** This emission unit is subject to specific requirements of 40 CFR 63, Subpart AA, Appendix A to Subpart AA - Applicability to General Provisions to Subpart AA, and alternative MACT monitoring plan (ASP Request 15-T-AP - Alternate Monitoring Plan to that Required by 40 CFR 63 Subparts

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection G. Emissions Unit 061

Green Superphosphoric Acid Plant

AA and BB dated 04/30/2015). The owner or operator is responsible for remaining in compliance with any updates made to NESHAP Subpart A or AA. To establish operating parameters for this emissions unit, the owner or operator must comply and demonstrate with the following:

- 1) Must comply with all conditions of the ASP Request 15-T-AP,
- 2) Must comply with all applicable requirements of NESHAP Subparts A and AA,
- 3) Specifically notify the department the testing will be for establishing allowable ranges for this emissions unit according to NESHAP Subparts A and AA,
- 4) All tests must be precisely conducted according to the MACT standards and all applicable test methods,
- 5) All tests must clearly demonstrate compliance with all MACT standards and applicable test methods and requirements,
- 6) All tests shall be submitted to the Department in accordance with NESHAP Subparts A and AA,
- 7) Failure to meet any requirements of this condition, NESHAP Subpart A or AA, or the alternate plan will negate use of any new ranges derived from the test.

[40 CFR 63, Subpart A; 40 CFR 63, Subpart AA; and, ASP Request 15-T-AP.]

NESHAP 40 CFR 63 Requirements

G.30. NESHAP 40 CFR 63 Requirements - Subpart A. This emissions unit shall comply with all applicable requirements of 40 CFR 63, Subpart A, General Provisions, which have been adopted by reference in Rule 62-204.800(11)(d)1., F.A.C., except that the Secretary is not the Administrator for purposes of 40 CFR 63.5(e), 40 CFR 63.5(f), 40 CFR 63.6(g), 40 CFR 63.6(h)(9), 40 CFR 63.6(j), 40 CFR 63.13, and 40 CFR 63.14. The applicable 40 CFR 63, Subpart A, General Provisions to which this emissions unit is subject to are found at 40 CFR 63.1 and are included in **Appendix 40 CFR 63 Subpart A**. [Rule 62-204.800(11)(d)1., F.A.C.]

G.31. NESHAP 40 CFR 63 Requirements - Subpart AA. This emissions unit shall comply with all applicable requirements of 40 CFR 63, Subpart AA, National Emission Standards for Hazardous Air Pollutants (NESHAP) from Phosphoric Acid Manufacturing Plants, which have been adopted by reference in Rule 62-204.800(11)(b)18., F.A.C. The applicable 40 CFR 63, Subpart BB, NESHAP from Phosphoric Acid Manufacturing Plants to which this emissions unit is subject to are found at 40 CFR 63.600 and are included in **Appendix 40 CFR 63, Subpart AA**. [Rule 62-204.800(11)(b)18., F.A.C.]

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SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection H. Emissions Unit 066

“E” Sulfuric Acid Plant

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

EU No.	Brief Description
066	“E” Sulfuric Acid Plant

Detailed Description and Air Pollution Control Systems & Measures:

The “E” Sulfuric Acid Plant utilizes the double absorption process to produce sulfuric acid and to control sulfur dioxide (SO₂) emissions. This emissions unit uses Brinks mist eliminators to control sulfuric acid mist (SAM) emissions. The Drying Tower is an all-alloy tower, and this unit has a single Heat Exchanger (as per the changes in Permit No. 0470002-065-AC). The plant is a 2750 tons per day of sulfuric acid plant (100% H₂SO₄ basis).

Stack Parameters:

The stack exhaust gas characteristics are typically as follows: exhaust gas temperature of 156° F; exhaust gas flow rate 131,840 acfm; stack height of 200 ft; and, stack diameter of 9.5 feet.

{Permitting Notes: This emissions unit is regulated under: NSPS 40 CFR 60, Subpart H, Standards of Performance for Sulfuric Acid Plants, adopted and incorporated by reference in Rule 62-204.800(8)(b), F.A.C.; Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD) [PSD-FL-082]; Rule 296.402, F.A.C., Sulfuric Acid Plants; and, the Federal U.S. EPA Consent Decree, No. 14-707-BAJ-SCR entered between White Springs Agricultural Chemicals, Inc and the U.S. Environmental Protection Agency (U.S. EPA).}

Essential Potential to Emit (PTE) Parameters

- H.1. Permitted Capacity.** The production rate shall not exceed 2750 TPD, expressed as 100% H₂SO₄ or 114.58 TPH. [Rules 62-4.160(2) and 62-210.200, PTE, F.A.C.; and, Permit Nos. AC24-56211/PSD-FL-082 & 0470002-122-AC.]
- H.2. Emissions Unit Testing.** See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]
- H.3. Hours of Operation.** This emissions unit may operate continuously (8,760 hours/year). [Rule 62-210.200, PTE, F.A.C.]

Emission Limitations and Standards

Unless otherwise specified, the averaging time(s) for Specific Conditions **H.4.** & **H.6.** is based on the specified averaging time of the applicable test method.

H.4. Visible Emissions. Visible emissions shall not exceed 10% opacity. [40 CFR 60.83(a)(2); and, Permit No. AC24-56211/PSD-FL-082.]

- H.5. SO₂ Emissions.** Sulfur dioxide (SO₂) emissions shall not exceed:
- 1) 2.6 lb/ton, 3-hr rolling average (not including startup and shutdown periods); and,
 - 2) 2.3 lb/ton, 365 day rolling average (including startup and shutdown periods).
 - 3) Cap, Effective January 1, 2023, the following SO₂ emission cap applies to the combined CEMs-measured emissions from SAP E and F: 840 lb/hr on 24-hour block averaging period (6:00 a.m. to 6:00 a.m.). Compliance with this cap shall be shown using certified SO₂ CEMS data to demonstrate initial compliance with the SO₂ emission cap.

{Permitting Notes: These SO₂ emission limits superseded the SO₂ emission limits stated in the previously issued active construction permits. Based on the 2.6 and 2.3 lb/ton limits, the equivalent allowable emissions are 297.9 lbs./hour (maximum 3-hr average) & 1,154 tons/year.}

Pursuant to Consent Decree Condition 41.b.iii, the short-term SO₂ emissions limit, long-term SO₂ emissions limit, and acid mist emission limit established in Section IV.A and IV.B of the Consent Decree shall not be relaxed.

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection H. Emissions Unit 066

“E” Sulfuric Acid Plant

[Permit Nos. 0470002-107-AC, 0470002-122-AC & 0470002-132-AC; and Specific Conditions 3.5. & 2.10. (federal Consent Decree No. 14-707-BAJ-SCR, attached to this permit) & Rule 62-4.030, F.A.C. – General Prohibition and Rule 62-4.210, F.A.C. – Construction Permits]

- H.6. Sulfuric Acid Mist (SAM).** SAM emissions shall not exceed 0.075 kg per metric ton of acid produced (0.15 lb per ton), the production being expressed as 100% H₂SO₄, and 17.19 lbs/hr and 75.3 TPY.

Pursuant to Consent Decree Condition 41.b.iii, the short-term SO₂ emissions limit, long-term SO₂ emissions limit, and acid mist emission limit established in Section IV.A and IV.B of the Consent Decree shall not be relaxed.

[40 CFR 60.83(a)(1); Permit Nos. AC24-56211/PSD-FL-082 & 0470002-122-AC; and, federal Consent Decree No. 14-707-BAJ-SCR, attached to this permit.]

Excess Emissions

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

- H.7. Excess Emissions Allowed.** Excess emissions resulting from startup, shutdown or malfunction of any emissions unit 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.]
- H.8. 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.]
- H.9. Excess Emissions Notification.** In case of excess emissions resulting from a malfunction, the permittee shall immediately notify the Air Compliance Section of the Northeast District Office of the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(5), F.A.C.]
- H.10. Not federally enforceable. Startup Practices.** The permittee shall follow the *MEMORANDUM OF UNDERSTANDING REGARDING BEST OPERATIONAL START-UP PRACTICES FOR SULFURIC ACID PLANTS*. [Signed and Executed on October 25, 1989 (Attachment A), Rules 62-4.070(1)&(3) and 62-210.700(1), F.A.C.]
- H.11. 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(1)&(3), F.A.C.]

Continuous Emissions Monitoring Requirements

- H.12. SO₂ CEMS.** A continuous monitoring system for the measurement of sulfur dioxide shall be installed, calibrated, maintained, and operated. The pollutant gas used to prepare calibration gas mixtures under Performance Specification 2 and for calibration checks under 40 CFR 60.13(d), shall be sulfur dioxide (SO₂). Method 6C shall be used for conducting monitoring system performance evaluations under 40 CFR 60.13(c). [40 CFR 60.84(a); AC24-56211/PSD-FL-082]

*{Permitting Note: To assure that the SO₂ monitoring requirements on SAP E satisfy the conditions of the Consent Decree (see **Appendix CD, Condition 15**) and the conditions of 40 CFR 60.13(e) related to minimum requirements for the continuous operation of the SO₂ CEMS, the permittee has voluntarily elected, but is not required to maintain, operate, and calibrate a back-up, single-span (0-1000 ppm) SO₂ CEMS and a single-span (0-21%) O₂ CEMS on SAP E. These backup CEMS immediately began recording data when either, or both of the primary CEMS experience down-time.}*

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection H. Emissions Unit 066

"E" Sulfuric Acid Plant

- H.13. SO₂ Monitoring System.** The permittee shall operate, calibrate and maintain a dual range SO₂ monitoring system on SAP **FE**. [Specific Conditions 3.1., Permit No. 0470002-107-AC.]
- H.14. CEMS Plan.** The permittee shall follow all applicable terms and conditions contained in the CEMS Plan for SO₂ emissions as they relate to SAP E. The CEMS Plan for SO₂ emissions is included in **Appendix CEMS Plan for SO₂**. [Permit No. 0470002-107-AC, Specific Condition 3.5.]
- H.15. Sulfur Dioxide Excess Emissions.** For the purpose of reports under 40 CFR 60.7(c), periods of excess emissions shall be all three-hour periods (or the arithmetic average of three consecutive one-hour periods) during which the integrated average sulfur dioxide emissions exceed the applicable standards. [40 CFR 60.84(e); AC24-56211/PSD-FL-082]

Test Methods and Procedures

- H.16. Visible Emissions.** The visible emissions (VE) test method shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-204.800, F.A.C. and shall be performed once every calendar year (January 1 - December 31). [40 CFR 60.85(b)(4); Rules 62-204.800(8)(b)12. And 62-297.310(7)(b)., F.A.C.; and, AC24-56211/PSD-FL-082.]
- H.17. Sulfur Dioxide.** The following procedures and test methods shall be used to determine sulfur dioxide emissions. A compliance test shall be conducted once every calendar year (January 1 - December 31):
- (a) The test methods in 40 CFR 60 Appendix A or other methods and procedures as specified in this condition, shall be used, except as provided in 40 CFR 60.8(b).
 - (b) Method 6C or Method 8 shall be used to determine the Sulfur Dioxide concentration of the stack gas (Cs). The moisture content may be considered to be zero. The sampling time for each run shall be at least 60 minutes.
 - (c) Method 3A shall be used to determine the Oxygen concentration of the stack gas. The sampling time for each run shall be at least 60 minutes.
- The emission rate (Es) of sulfur dioxide shall be computed for each run using the following equation:
- $$Es = (Cs * S) / [0.265 - (0.0126 * \% O_2)]$$
- where:
- Es = emission rate of SO₂, kg/metric ton (lb/ton) of 100 percent of H₂SO₄ produced.
 - Cs = stack gas concentration of SO₂, kg/dscm (lb/dscf).
 - S = acid production rate factor, 368 dscm/metric ton (11,800 dscf/ton) of 100 percent H₂SO₄ produced.
 - % O₂ = stack gas oxygen concentration, percent dry basis.
- [40 CFR 60.85(a), (b) & (c); Rule 62-297.310(8)(a), F.A.C.; Permit No. AC24-56211/PSD-FL-082; and, federal Consent Decree No. 14-707-BAJ-SCR, attached to this permit.]

- H.18. Sulfuric Acid Mist.** The following procedures and test methods shall be used to determine sulfuric acid mist. A compliance test shall be conducted once every calendar year (January 1 - December 31).
- (a) The test methods in 40 CFR Appendix A or other methods and procedures as specified in this condition, shall be used, except as provided in 40 CFR 60.8(b).
 - (b) Method 8 shall be used to determine the Sulfuric Acid Mist concentration in the stack gas. The moisture content may be considered to be zero. The sampling time for each run shall be at least 60 minutes.
 - (c) Method 3A shall be used to determine the Oxygen concentration of the stack gas. The sampling time for each run shall be at least 60 minutes.
 - (d) The emission rate (Es) of sulfuric acid mist shall be computed for each run using the equation in above, with the Sulfuric Acid Mist concentration (from (b), above) used in place of the SO₂ concentration (Cs as determined in accordance with Specific Condition **H.17.**, above)
- [40 CFR 60.85(a),(b),(c); AC24-56211/PSD-FL-082; and, federal Consent Decree No. 14-707-BAJ-SCR, attached to this permit.]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection H. Emissions Unit 066

"E" Sulfuric Acid Plant

H.19. Test Methods. When 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
7E	Determination of Nitrogen Oxide Emissions from Stationary Sources
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 62-204.800, F.A.C.; 40 CFR 60, Appendix A.]

{Permitting Note: During opacity testing, Rule 62-297.310(3)(b), F.A.C does not apply. Rule 62-297.310(5)(b), F.A.C. shall apply during opacity test observation period. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. See Appendix TR, Conditions TR.2 and TR.4.}

H.20. Common Testing Requirements. Unless otherwise specified, any 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.]

{Permitting Note: Air compliance test notifications can now be completed online in the Department's Business Portal. To access this online process, go to <http://www.fldepportal.com/go/home> and sign in (or register if you're a new user) from the link in the upper right corner of the page. On the Welcome page select the Submit option, then select Registration/Notification, and then click on Air Compliance Test Notifications. Once in the process, just carefully read the instructions on each screen (and under the Help tabs) to complete the notification.}

Recordkeeping and Reporting Requirements

H.21. Daily and Monthly Recordkeeping. In order to document compliance with Specific Conditions **H.1.** & **H.5.**, the permittee shall maintain a daily record of sulfuric acid plant production rate (in TPD as 100% H₂SO₄) and sulfur dioxide emissions for each plant. These records shall include the following for each operating day of the month. The permittee shall also maintain a monthly record of the sulfur dioxide emission rate in tons per year as a rolling 12-consecutive month average as shown below:

- a. Daily
 - (1) hours of operation;
 - (2) the sulfuric acid production (in tons as 100% H₂SO₄);
 - (3) the sulfuric acid production rate, in tons per hour (daily average)
 - (4) the SO₂ emission rate, in pounds per hour (daily average); and
 - (5) the SO₂ emission rate, in pounds per ton of 100% H₂SO₄.Daily records shall be completed within 5 business days of the day of operation.
- b. Monthly (Rolling 12-consecutive months). The SO₂ emission rate, tons per year. Monthly records shall be completed by the end of the next month. These records shall be used to show compliance with the SO₂ emission cap given in **specific condition H.5.3)** of this subsection.

[Permit No. 470002-132-AC and Rules 62-4.070(1)&(3) & 62-213.440(1), F.A.C.]

H.22. Excess SO₂ Reporting. For each plant, the permittee shall submit a written report of excess sulfur dioxide emissions each calendar quarter in accordance with 40 CFR 60.7 (b) and (c) and Rule 62-296.402(4), F.A.C. Periods of excess emissions shall be all three-hour periods (or the arithmetic average of three consecutive one-hour periods) during which the integrated average sulfur dioxide emissions exceed the applicable standard under

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection H. Emissions Unit 066

"E" Sulfuric Acid Plant

40 CFR 60.82. The excess emission report shall also include a statement of all periods during the quarter when the sulfur dioxide monitoring system was inoperative. The quarterly sulfur dioxide excess emission report shall be submitted to the Northeast District Office of the Department. All reports shall be postmarked by the 30th day following the end of each calendar quarter. [Rules 62-204.800(8) and 62-213.440(1)(b), F.A.C.; and, 40 CFR 60.7 and 60.84(e).]

H.23. Startup/Shutdown and Malfunction Reporting. For each plant, the permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system (sulfur dioxide) or monitoring device is inoperative. Records on monitoring system performance evaluations, calibrations and maintenance shall be maintained in accordance with 40 CFR 60.7(d). [Rules 62-204.800(8) and 62-213.440(1)(b), F.A.C.; and, 40 CFR 60.7.]

H.24. Record Maintenance. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this section recorded in a permanent form suitable for inspection. [Rules 62-204.800(8) & 62-213.440(b), F.A.C.; and, 40 CFR 60.7.]

H.25. Reporting Schedule. The following reports and notifications shall be submitted to the Compliance Authority:

Report	Reporting Deadline	Related Conditions
NSPS Excess Emissions and Monitoring System Performance	Every 6 months (semi-annual), except when more frequent reporting is specifically required	Appendices A and H

[40 CFR 60, Subparts A & H.]

{Permitting Note: Quarterly reports required under Condition H.22 should suffice for semi-annual reports required under Condition H.25.}

H.26. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

NSPS 40 CFR 60 Requirements

H.27. NSPS 40 CFR 60 Requirements - Subpart A. These emission units shall comply with all applicable requirements of 40 CFR 60, Subpart A, General Provisions including:

40 CFR 60.7, Notification and Recordkeeping

40 CFR 60.8, Performance Tests

40 CFR 60.11, Compliance with Standards and Maintenance Requirements

40 CFR 60.12, Circumvention

40 CFR 60.13, Monitoring Requirements

40 CFR 60.19, General Notification and Reporting requirements

adopted by reference in Rule 62-204.800(8)(d), F.A.C., except that the Secretary is not the Administrator for purposes of 40 CFR 60.4, 40 CFR 60.8(b)(2) and (3), 40 CFR 60.11(e)(7) and (8), 40 CFR 60.13(g), (i) and (j)(2), and 40 CFR 60.16. These emission units shall comply with **Appendix 40 CFR 60 Subpart A** attached to this permit. [Rule 62-204.800(8)(d), F.A.C.]

H.28. NSPS 40 CFR 60 Requirements - Subpart H. Except as otherwise provided in this permit, these emission units shall comply with all applicable provisions of 40 CFR 60, Subpart H, Standards of Performance for Sulfuric Acid Plants, adopted by reference in Rule 62-204.800(8)(b)12., F.A.C. These emission units shall comply with **Appendix 40 CFR 60 Subpart H** included with this permit. [Rule 62-204.800(8)(b)12., F.A.C.]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection H. Emissions Unit 066

“E” Sulfuric Acid Plant

H.29. Federal U.S. EPA Consent Decree (CD). The permittee shall follow all applicable terms and conditions contained in the CD as they relate to SAP E. The portions of the CD applicable to SAP E are contained in Appendix CD, Consent Decree No. 14-707-BAJ-SCR of this permit (see attachments to this permit). [Rule 62-213.440, F.A.C.]. *{Permitting Note: Expired conditions of the Consent Decree are no longer applicable.}*

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SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection I. Emissions Unit 067

“F” Sulfuric Acid Plant

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

EU No.	Brief Description
067	“F” Sulfuric Acid Plant

Detailed Description and Air Pollution Control Systems & Measures:

The “F” Sulfuric Acid Plant utilizes the double absorption process to produce sulfuric acid and to control sulfur dioxide (SO₂) emissions. This emissions unit uses Brinks mist eliminators to control sulfuric acid mist (SAM) emissions. The plant is a 2750 tons per day of sulfuric acid plant (100% H₂SO₄ basis).

Stack Parameters:

The stack exhaust gas characteristics are typically as follows: exhaust gas temperature of 156° F; exhaust gas flow rate 125,460 acfm; stack height of 200 ft; and, stack diameter of 9.5 feet.

{Permitting Notes: This emissions unit is regulated under: NSPS 40 CFR 60, Subpart H, Standards of Performance for Sulfuric Acid Plants, adopted and incorporated by reference in Rule 62-204.800(8)(b), F.A.C.; Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD) [PSD-FL-082]; Rule 296.402, F.A.C., Sulfuric Acid Plants; and, the Federal U.S. EPA Consent Decree, No. 14-707-BAJ-SCR entered between White Springs Agricultural Chemicals, Inc. and the U.S. Environmental Protection Agency (U.S. EPA).}

Essential Potential to Emit (PTE) Parameters

- I.1. Permitted Capacity.** The production rate shall not exceed 2750 TPD, expressed as 100% H₂SO₄ or 114.58 TPH. [Rules 62-4.160(2) and 62-210.200, PTE, F.A.C.; and, Permit Nos. AC24-56209, AC24-56211/PSD-FL-082 & 0470002-122-AC.]
- I.2. Emissions Unit Testing.** See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]
- I.3. Hours of Operation.** This emissions unit may operate continuously (8,760 hours/year). [Rule 62-210.200, PTE, F.A.C.]

Emission Limitations and Standards

Unless otherwise specified, the averaging time(s) for Specific Conditions **I.4.** & **I.6.** is based on the specified averaging time of the applicable test method.

- I.4. Visible Emissions.** Visible emissions shall not exceed 10% opacity. [40 CFR 60.83(a)(2); and, Permit Nos. AC24-56209 & AC24-56211/PSD-FL-082.]
- I.5. SO₂ Emissions.** Sulfur dioxide (SO₂) emissions shall not exceed:
- 2.6 lb/ton, 3-hr rolling average (not including startup and shutdown periods) {equivalent to 270.92 lbs/hr}; and,
 - 2.3 lb/ton, 365 day rolling average (including startup and shutdown periods) {equivalent to 1,049.38 TPY}.
 - Cap, Effective January 1, 2023, the following SO₂ emission cap applies to the combined CEMs-measured emissions from SAP E and F: 840 lb/hr on 24-hour block averaging period (6:00 a.m. to 6:00 a.m.) Compliance with this cap shall be shown using certified SO₂ CEMS data to demonstrate initial compliance with the SO₂ emission cap.
“lb/ton” refers to pounds of sulfur dioxide emitted per ton of 100% sulfuric acid produced.
- {Permitting Note: The 2.6 lb/ton and 2.3 lb/ton SO₂ emission limits are from Permit No. 0470002-107-AC which superseded the SO₂ emission limits stated in previously issued active construction permits.}*

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection I. Emissions Unit 067

"F" Sulfuric Acid Plant

Pursuant to Consent Decree Condition 41.b.iii, the short-term SO₂ emissions limit, long-term SO₂ emissions limit, and acid mist emission limit established in Section IV.A and IV.B of the Consent Decree shall not be relaxed.

[40 CFR 60.82(a); Permit Nos. AC24-56209, AC24-56211/PSD-FL-082; Specific Conditions 2.10. & 3.3., Permit Nos. 0470002-107-AC, 0470002-122-AC, 0470002-132-AC; and, federal Consent Decree No. 14-707-BAJ-SCR, attached to this permit & Rule 62-4.030, F.A.C. – General Prohibition and Rule 62-4.210, F.A.C. – Construction Permits.]

- I.6. Sulfuric Acid Mist (SAM).** SAM emissions, expressed as H₂SO₄, shall not exceed 0.075 kg per metric ton of acid produced (0.15 lb per ton), the production being expressed as 100% H₂SO₄, 17.19 lbs/hr and 75.3 TPY. Pursuant to Consent Decree Condition 41.b.iii, the short-term SO₂ emissions limit, long-term SO₂ emissions limit, and acid mist emission limit established in Section IV.A and IV.B of the Consent Decree shall not be relaxed.

[40 CFR 60.83(a)(1); Permit Nos. AC24-56209, AC24-56211/PSD-FL-082 & 0470002-122-AC; and, federal Consent Decree No. 14-707-BAJ-SCR, attached to this permit.]

Excess Emissions

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

- I.7. Excess Emissions Allowed.** Excess emissions resulting from startup, shutdown or malfunction of any emissions unit 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.]
- I.8. 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.]
- I.9. Excess Emissions Notification.** In case of excess emissions resulting from a malfunction, the permittee shall immediately notify the Air Compliance Section of the Northeast District Office of the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(5), F.A.C.]
- I.10. Not federally enforceable. Startup Practices.** The permittee shall follow the *MEMORANDUM OF UNDERSTANDING REGARDING BEST OPERATIONAL START-UP PRACTICES FOR SULFURIC ACID PLANTS*. [Signed and Executed on October 25, 1989 (Attachment A), Rules 62-4.070(1)&(3) and 62-210.700(1), F.A.C.]
- I.11. 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(1)&(3), F.A.C.]

Continuous Emissions Monitoring Requirements

- I.12. SO₂ CEMS.** A continuous monitoring system for the measurement of sulfur dioxide shall be installed, calibrated, maintained, and operated. The pollutant gas used to prepare calibration gas mixtures under Performance Specification 2 and for calibration checks under 40 CFR 60.13(d), shall be sulfur dioxide (SO₂). Method 6C shall be used for conducting monitoring system performance evaluations under 40 CFR 60.13(c). [40 CFR 60.84(a); AC24-56211/PSD-FL-082]

*{Permitting Note: To assure that the SO₂ monitoring requirements on SAP F satisfy the conditions of the Consent Decree (see **Appendix CD, Condition 15**) and the conditions of 40 CFR 60.13(e) related to minimum requirements for the continuous operation of the SO₂ CEMS, the permittee has voluntarily elected,*

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection I. Emissions Unit 067

“F” Sulfuric Acid Plant

but is not required to maintain, operate, and calibrate a back-up, single-span (0-1000 ppm) SO₂ CEMS and a single-span (0-21%) O₂ CEMS on SAP F. These backup CEMS immediately began recording data when either, or both of the primary CEMS experience down-time.}

- I.13. SO₂ Monitoring System.** The permittee shall operate, calibrate and maintain a dual range SO₂ monitoring system on SAP F. [Specific Conditions 3.1., Permit No. 0470002-107-AC.]
- I.14. CEMS Plan.** The permittee shall follow all applicable terms and conditions contained in the CEMS Plan for SO₂ emissions as they relate to SAP F. The CEMS Plan for SO₂ emissions is included in **Appendix CEMS Plan for SO₂**. [Permit No. 0470002-107-AC, Specific Condition 3.4.]
- I.15. Sulfur Dioxide Excess Emissions.** For the purpose of reports under 40 CFR 60.7(c), periods of excess emissions shall be all three-hour periods (or the arithmetic average of three consecutive one-hour periods) during which the integrated average sulfur dioxide emissions exceed the applicable standards. [40 CFR 60.84(e); Permit Nos. AC24-56209 & AC24-56211/PSD-FL-082]

Test Methods and Procedures

- I.16. Visible Emissions.** The visible emissions (VE) test method shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-204.800, F.A.C. and shall be performed once every calendar year (January 1 - December 31). [40 CFR 60.85(b)(4); and, Rules 62-204.800(8)(b)12. and 62-297.310(7)(b)., F.A.C.]
- I.17. Sulfur Dioxide.** The following procedures and test methods shall be used to determine sulfur dioxide emissions. A compliance test shall be conducted once every calendar year (January 1 - December 31):
- (a) The test methods in 40 CFR Appendix A or other methods and procedures as specified in this condition, shall be used, except as provided in 40 CFR 60.8(b).
 - (b) Method 6C or Method 8 shall be used to determine the Sulfur Dioxide concentration of the stack gas (Cs). The moisture content may be considered to be zero. The sampling time for each run shall be at least 60 minutes.
 - (c) Method 3A shall be used to determine the Oxygen concentration of the stack gas. The sampling time for each run shall be at least 60 minutes.
- The emission rate (Es) of sulfur dioxide shall be computed for each run using the following equation:
- $$Es = (Cs * S) / [0.265 - (0.0126 * \%O_2)]$$
- where:
- Es = emission rate of SO₂, kg/metric ton (lb/ton) of 100 percent of H₂SO₄ produced.
 - Cs = stack gas concentration of SO₂, kg/dscm (lb/dscf).
 - S = acid production rate factor, 368 dscm/metric ton (11,800 dscf/ton) of 100 percent H₂SO₄ produced.
 - %O₂ = stack gas oxygen concentration, percent dry basis.
- [40 CFR 60.85(a), (b) & (c); Rule 62-297.310(8)(a), F.A.C.; and, Permit No. AC24-56209/PSD-FL-082.]
- I.18. Sulfuric Acid Mist.** The following procedures and test methods shall be used to determine sulfuric acid mist. A compliance test shall be conducted once every calendar year (January 1 - December 31).
- (a) The test methods in 40 CFR Appendix A or other methods and procedures as specified in this condition, shall be used, except as provided in 40 CFR 60.8(b).
 - (b) Method 8 shall be used to determine the Sulfuric Acid Mist concentration in the stack gas. The moisture content may be considered to be zero. The sampling time for each run shall be at least 60 minutes.
 - (c) Method 3A shall be used to determine the Oxygen concentration of the stack gas. The sampling time for each run shall be at least 60 minutes.
 - (d) The emission rate (Es) of sulfuric acid mist shall be computed for each run using the equation in above, with the Sulfuric Acid Mist concentration (from (b), above) used in place of the SO₂ concentration (Cs as determined in accordance with Condition **I.17.**, above)

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“F” Sulfuric Acid Plant

[40 CFR 60.85(a),(b),(c); AC24-56211/PSD-FL-082; and, federal Consent Decree No. 14-707-BAJ-SCR, attached to this permit.]

I.19. Test Methods. When 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
7E	Determination of Nitrogen Oxide Emissions from Stationary Sources
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 62-204.800, F.A.C.; 40 CFR 60, Appendix A.]

{Permitting Note: During opacity testing, Rule 62-297.310(3)(b), F.A.C. does not apply. Rule 62-297.310(5)(b), F.A.C. shall apply during opacity test observation period. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. See Appendix TR, Conditions TR.2 and TR.4.}

I.20. Common Testing Requirements. Unless otherwise specified, any 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.]

{Permitting Note: Air compliance test notifications can now be completed online in the Department's Business Portal. To access this online process, go to <http://www.fldepportal.com/go/home> and sign in (or register if you're a new user) from the link in the upper right corner of the page. On the Welcome page select the Submit option, then select Registration/Notification, and then click on Air Compliance Test Notifications. Once in the process, just carefully read the instructions on each screen (and under the Help tabs) to complete the notification.}

Recordkeeping and Reporting Requirements

I.21. Daily and Monthly Recordkeeping. In order to document compliance with Specific Conditions **I.1. & I.5.**, the permittee shall maintain a daily record of sulfuric acid plant production rate (in TPD as 100% H₂SO₄) and sulfur dioxide emissions for each plant. These records shall include the following for each operating day of the month. The permittee shall also maintain a monthly record of the sulfur dioxide emission rate in tons per year as a rolling 12-consecutive month average as shown below:

- a. Daily
 - (1) hours of operation;
 - (2) the sulfuric acid production (in tons as 100% H₂SO₄);
 - (3) the sulfuric acid production rate, in tons per hour (daily average)
 - (4) the SO₂ emission rate, in pounds per hour (daily average); and
 - (5) the SO₂ emission rate, in pounds per ton of 100% H₂SO₄.Daily records shall be completed within 5 business days of the day of operation.
- b. Monthly (Rolling 12-consecutive months). The SO₂ emission rate, tons per year. Monthly records shall be completed by the end of the next month. These records shall be used to show compliance with the SO₂ emission cap given in **specific condition I.5a.c** of this subsection.

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

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“F” Sulfuric Acid Plant

- I.22. Excess SO₂ Reporting.** For each plant, the permittee shall submit a written report of excess sulfur dioxide emissions each calendar quarter in accordance with 40 CFR 60.7 (b) and (c) and Rule 62-296.402(4), F.A.C. Periods of excess emissions shall be all three-hour periods (or the arithmetic average of three consecutive one-hour periods) during which the integrated average sulfur dioxide emissions exceed the applicable standard under 40 CFR 60.82. The excess emission report shall also include a statement of all periods during the quarter when the sulfur dioxide monitoring system was inoperative. The quarterly sulfur dioxide excess emission report shall be submitted to the Northeast District Office of the Department. All reports shall be postmarked by the 30th day following the end of each calendar quarter. [Rules 62-204.800(8) and 62-213.440(1)(b), F.A.C.; and, 40 CFR 60.7 and 60.84(e).]
- I.23. Startup/Shutdown and Malfunction Reporting.** For each plant, the permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system (sulfur dioxide) or monitoring device is inoperative. Records on monitoring system performance evaluations, calibrations and maintenance shall be maintained in accordance with 40 CFR 60.7(d). [Rules 62-204.800(8) and 62-213.440(1)(b), F.A.C.; and, 40 CFR 60.7.]
- I.24. Record Maintenance.** The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this section recorded in a permanent form suitable for inspection. [Rules 62-204.800(8) & 62-213.440(b), F.A.C.; and, 40 CFR 60.7.]
- I.25. Reporting Schedule.** The following reports and notifications shall be submitted to the Compliance Authority:

Report	Reporting Deadline	Related Conditions
NSPS Excess Emissions and Monitoring System Performance	Every 6 months (semi-annual), except when more frequent reporting is specifically required	Appendices A and H

[40 CFR 60, Subparts A & H.]

{Permitting Note: Quarterly reports required under condition I.22. should suffice for semi-annual reports required under Condition I.25.}

- I.26. Other Reporting Requirements.** See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

NSPS 40 CFR 60 Requirements

- I.27. NSPS 40 CFR 60 Requirements - Subpart A.** These emission units shall comply with all applicable requirements of 40 CFR 60, Subpart A, General Provisions including:
- 40 CFR 60.7, Notification and Recordkeeping
 - 40 CFR 60.8, Performance Tests
 - 40 CFR 60.11, Compliance with Standards and Maintenance Requirements
 - 40 CFR 60.12, Circumvention
 - 40 CFR 60.13, Monitoring Requirements
 - 40 CFR 60.19, General Notification and Reporting requirements
- adopted by reference in Rule 62-204.800(8)(d), F.A.C., except that the Secretary is not the Administrator for purposes of 40 CFR 60.4, 40 CFR 60.8(b)(2) and (3), 40 CFR 60.11(e)(7) and (8), 40 CFR 60.13(g), (i) and (j)(2), and 40 CFR 60.16. These emission units shall comply with **Appendix 40 CFR 60 Subpart A** attached to this permit. [Rule 62-204.800(8)(d), F.A.C.]

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“F” Sulfuric Acid Plant

- I.28.** NSPS 40 CFR 60 Requirements - Subpart H. Except as otherwise provided in this permit, these emission units shall comply with all applicable provisions of 40 CFR 60, Subpart H, , Standards of Performance for Sulfuric Acid Plants, adopted by reference in Rule 62-204.800(8)(b)12., F.A.C. These emission units shall comply with **Appendix 40 CFR 60 Subpart H** included with this permit. [Rule 62-204.800(8)(b)12., F.A.C.]
- I.29.** Federal U.S. EPA Consent Decree (CD). The permittee shall follow all applicable terms and conditions contained in the CD as they relate to SAP F. The portions of the CD applicable to SAP F are contained in Appendix CD, Consent Decree No. 14-707-BAJ-SCR of this permit (see attachments to this permit). [Rule 62-213.440, F.A.C.].

{Permitting Note: Expired conditions of the Consent Decree are no longer applicable.}

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Subsection J. Emissions Unit 069

“D” Phosphoric Acid Plant

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

EU No.	Brief Description
069	“D” Phosphoric Acid Plant

Detailed Description:

This EU is the “D” Phosphoric Acid Plant. This phosphoric acid plant has a design feed rate of 110 tons per hour equivalent P₂O₅ feed input.

Air Pollution Control Systems and Measures:

Fluoride emissions from the “D” Phosphoric Acid Plant are controlled by a wet scrubber.

Stack Parameters:

The stack exhaust gas characteristics are typically as follows: exhaust gas temperature of 90° F; exhaust gas flow rate 35,000 acfm; stack height of 105 ft; and, stack diameter of 3 feet.

{Permitting Notes: This emission unit is regulated under: NESHAP 40 CFR 63, Subpart AA - NESHAP From Phosphoric Acid Manufacturing Plants, adopted and incorporated by reference in Rule 62-204.800, F.A.C.; Rule 62-212.400, F.A.C., Prevention of Significant Deterioration [PSD-FL-297]; and, Rule 62-296.403, F.A.C., Phosphate Processing. Because compliance has been demonstrated with NESHAP 40 CFR 63, Subpart AA, this emissions unit is exempted from the requirements of NSPS, 40 CFR 60, Subpart T.}

Essential Potential to Emit (PTE) Parameters

J.1. Permitted Capacity. The operation rate shall not exceed the maximum daily 1-hour average rate of 110 tons 100% P₂O₅ input. The operation rate shall not exceed 800,000 tons during any 12 consecutive months of 100% P₂O₅ input. [Rules 62-4.160(2) and 62-210.200, PTE, F.A.C.; and, Permit Nos. 0470002-034-AC, and 0470002-039-AC/PSD-FL-297.]

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

J.3. Hours of Operation. This emissions unit may operate continuously (8,760 hours/year). [Rule 62-210.200, PTE, F.A.C.; and, Permit No. 0470002-039-AC/PSD-FL-297.]

Emission Limitations and Standards

Unless otherwise specified, the averaging time(s) for Specific Conditions **J.4. - J.5.** are based on the specified averaging time of the applicable test method.

J.4. Fluoride Emissions. Total fluorides emissions shall not exceed the standards below:

Pollutant	Standards	Equivalent		Regulatory Citation
		lbs/hr	TPY	
Total Fluorides	0.012 lb/ton equivalent P ₂ O ₅ feed	1.32	4.8	PSD-FL-297
	0.020 lb/ton equivalent P ₂ O ₅ feed	---	---	NSPS 40 CFR 60.202(a) MACT 40 CFR 63.602(a)

{Permitting Note: The limits established in Permit No. 0470002-039-AC/PSD-FL-297 are more stringent than the NSPS and MACT standards.}

[40 CFR 60.202(a); 40 CFR 63.602(a); and, and Permit No. 0470002-039-AC/PSD-FL-297.]

J.5. Visible Emissions. Visible emissions shall not be equal to or greater than 20% opacity. [Rule 62-296.320(4)(b), F.A.C.]

Excess Emissions

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"D" Phosphoric Acid Plant

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

J.6. Excess Emissions Allowed. Excess emissions resulting from startup, shutdown or malfunction of any emissions unit 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.]

J.7. 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.]

J.8. Excess Emissions Notification. In case of excess emissions resulting from a malfunction, the permittee shall immediately notify the Air Compliance Section of the Northeast District Office of the Department of Environmental Protection in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]

Monitoring of Operations

J.9. Phosphorus Feed Rate. The permittee shall install, calibrate, maintain, and operate a monitoring device which can be used to determine the mass flow of phosphorus-bearing feed material to the process. The monitoring device shall have an accuracy of $\pm 5\%$ over its operating range. [40 CFR 60.203(a).]

J.10. Pressure Drop. The permittee shall install, calibrate, maintain, and operate a monitoring device which continuously measures and permanently records the total pressure drop across the process scrubbing system. The monitoring device shall have an accuracy of $\pm 5\%$ over its operating range. [40 CFR 60.203(c).]

J.11. Alternate Monitoring Plan. The pollution control equipment shall be operated in accordance with the Department approved Alternate Monitoring Plan for the scrubbers associated with this unit. Modification of the Alternate Monitoring Plan requires Department approval. [Rule 62-4.070(1)&(3), F.A.C.; and, 40 CFR 63, Subpart AA.]

J.12. Scrubber Monitoring Systems. The permittee shall install, calibrate, maintain, and operate the following monitoring systems:

- e. **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.
- f. **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 $\pm 5\%$ over its operating range.
- g. **Fan Amperage.** A monitoring system that continuously monitor fan amperage for each fan in the scrubbing system.
- h. **Liquid-to-gas Ratio, as applicable.**
 - a. A "liquid" 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 $\pm 5\%$ over its operating range.
 - b. A "gas" monitoring system as outlined in Table 3 of Subpart AA of Part 63 - Monitoring Equipment Operating Parameters which permanently records the flow rate of the scrubbing gas to each applicable scrubber in the process scrubbing system in 15-minute block averages.

[40 CFR 63.625(d); and, ASP Request 15-T-AP.]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection J. Emissions Unit 069

"D" Phosphoric Acid Plant

J.13. Scrubber Operating Parameters. In order to provide reasonable assurance that the fluoride emission limitation is being met, the permittee shall create and keep a record log of the scrubber operating parameters for each plant. The record log shall contain, at a minimum:

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

A log entry shall be made at least once for every shift (12 hours) that the Phosphoric Acid Plant operates. [Rules 62-4.070(1)&(3), 62-4.160(14)(b)&(c), and 62-213.440(b)2.b., F.A.C.]

{Permitting Note: The permittee may substitute continuous monitoring and strip chart recordings for the manual recordkeeping required by this specific condition.}

Test Methods and Procedures

J.14. Test Methods. When 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
13A	Determination of Total Fluoride Emissions from Stationary Sources - SPADNS Zirconium Lake Method
13B	Determination of Total Fluoride Emissions from Stationary Sources - Specific Ion Electrode Method

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 62-204.800, F.A.C.; and, 40 CFR 60, Appendix A.]

J.15. Common Testing Requirements. Unless otherwise specified, any 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.]

{Permitting Note: Air compliance test notifications can now be completed online in the Department's Business Portal. To access this online process, go to <http://www.fldepportal.com/go/home> and sign in (or register if you're a new user) from the link in the upper right corner of the page. On the Welcome page select the Submit option, then select Registration/Notification, and then click on Air Compliance Test Notifications. Once in the process, just carefully read the instructions on each screen (and under the Help tabs) to complete the notification.}

J.16. Annual Compliance Tests Required. During each calendar year (January 1st to December 31st), emissions from the scrubber shall be tested to demonstrate compliance with the emissions standards for fluoride. [Rule 62-297.310(8), F.A.C; and, 40 CFR 63.606(b).]

J.17. Additional Compliance Test Requirements. The following scrubber operating parameters shall be monitored and recorded during the compliance test and a summary of this data shall be included with the fluoride emissions test report:

- the water flow rate (gallons per minute);
- the scrubber pressure drop (inches of water); and
- the "equivalent P₂O₅ feed" rate.

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

[Rules 62-4.070(1)&(3), 62-4.160(14)(b), and 62-4.160(14)(c), F.A.C.]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection J. Emissions Unit 069

"D" Phosphoric Acid Plant

Recordkeeping and Reporting Requirements

- J.18. Daily Record.** The permittee shall maintain a daily record of the equivalent P_2O_5 feed rate for the phosphoric acid plant according to the procedure specified in 40 CFR 60.203(b) - *Monitoring of Operations* and the following recordkeeping procedure:
- Facility Name, Facility ID No. (0470002), Emission Unit ID No. (E.U. 069) and Description;
 - Date;
 - Total hours of operation;
 - Total equivalent P_2O_5 input, tons; and
 - Equivalent P_2O_5 feed rate, tons P_2O_5 per hour.
- Daily records shall be completed within 5 business days.
[Rule 62-4.070(1)&(3) F.A.C.; and, 40 CFR 60.203.]
- J.19. Downtime Reporting Requirements.** The monitoring devices required for the equivalent P_2O_5 feed rate and the total pressure drop measurement across the scrubber are considered inoperative when they are out-of-service or fail to produce valid data. Upon the occurrence of 48 consecutive hours of continuous monitoring system downtime, the permittee shall notify the Air Compliance Section, Northeast District Office of the Department by 5:00 p.m., or on the Department's next business day, of the incident and specify the corrective action being pursued. [Rule 62-4.130, F.A.C.]
- J.20. Method of Calculating P_2O_5 Feed Rate.** 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(f). [Rule 62-213.440(1)(b), F.A.C.; and, 40 CFR 63.605(b)(1).]
- J.21. Notification Requirements.** 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 includes the initial and annual performance test reports, excess emissions reports, and the summary report. [40 CFR 63.607.]
- J.22. Other Reporting Requirements.** See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

Other Requirements

- J.23. Alternate Monitoring Methods.** The permittee is subject to NESHAP alternate monitoring methods within ASP Request 15-T-AP - Alternate Monitoring Plan to that Required by 40 CFR 63 Subparts AA and BB dated 04/30/2015 (Attachment B); [40 CFR 63.632(a), ASP Request 15-T-AP.]
- J.24. Determining Allowable Range of Scrubber Operation Parameters.** 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 NESHAP Subpart AA 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(d) or (g). The Administrator retains the right to reduce the + 20 percent adjustment to the baseline average values of operating ranges in those instances where performance test results indicate that a source's level of emissions is near the value of an applicable emissions standard, but, in no instance shall the adjustment be reduced to less than + 10 percent. The owner or operator must notify the Administrator of the baseline average value and must notify the Administrator each time that the baseline value is changed as a result of the most recent performance test. The baseline average values used for compliance shall be based on the values

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

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"D" Phosphoric Acid Plant

determined during the most recent performance test. The new baseline average value shall be effective on the date following the performance test.

- (2) The owner or operator of any new or existing affected source shall establish, and provide to the Administrator for approval, allowable ranges of baseline average values for the pressure drop across and of the flow rate of the scrubbing liquid to each scrubber in the process scrubbing system for the purpose of assuring compliance with this section. Allowable ranges may be based upon baseline average values recorded during previous performance tests using the test methods required in NESHAP Subpart AA and established in the manner required in § 63.606(d) or (g). As an alternative, the owner or operator can establish the allowable ranges of baseline average values using the results of performance tests conducted specifically for the purposes of this paragraph using the test methods required in NESHAP Subpart AA and established in the manner required in § 63.606(d) or (g). The source shall certify that the control devices and processes have not been modified subsequent to the testing upon which the data used to establish the allowable ranges were obtained. The allowable ranges of baseline average values developed pursuant to the provisions of this paragraph must be submitted to the Administrator for approval. The owner or operator must request and obtain approval of the Administrator for changes to the allowable ranges of baseline values. When a source using the methodology of this paragraph is retested, the owner operator shall determine new allowable ranges of baseline average values unless the retest indicates no change in the operating parameters from previous tests. Any new allowable ranges of baseline average values resulting from the most recent performance test shall be effective on the date following the retest. Until changes to allowable ranges of baseline average values are approved by the Administrator, the allowable ranges for use in § 63.604 shall be based upon the range of baseline average values proposed for approval.

[40 CFR 63.605(d).]

- J.25. Maintaining Allowable Range of Scrubber Operation Parameters.** The permittee shall maintain daily averages of the pressure drop across each scrubber and of the flow rate of the scrubbing liquid to each scrubber within the allowable ranges established pursuant to 40 CFR 63.605(d)(1) or (2). [40 CFR 63.605.]
- J.26. Monitoring Scrubber Operation.** To comply with § 63.605(d)(1) or (2), the owner or operator shall use the monitoring systems in § 63.605(c) to determine the average pressure loss of the gas stream across each scrubber in the process scrubbing system and to determine the average flow rate of the scrubber liquid to each scrubber in the process scrubbing system during each of the total fluoride runs. The arithmetic averages of the three runs shall be used as the baseline average values for the purposes of § 63.605(d)(1) or (2). [40 CFR 63.606(d).]
- J.27. Determination of Total Fluoride Emissions.** The permittee shall determine compliance with the total fluorides standard as required in 40 CFR 63.606(d), based on the equivalent P_2O_5 computed as indicated in 40 CFR 63.606(d)(3). [40 CFR 63.606(d).]
- J.28. Federal Rule Applicability.** This emission unit is subject to specific requirements of 40 CFR 63, Subpart AA, Appendix A to Subpart AA - Applicability to General Provisions to Subpart AA, and alternative MACT monitoring plan (ASP Request 15-T-AP - Alternate Monitoring Plan to that Required by 40 CFR 63 Subparts AA and BB dated 04/30/2015). The owner or operator is responsible for remaining in compliance with any updates made to NESHAP Subpart A or AA. To establish operating parameters for this emissions unit, the owner or operator must comply and demonstrate with the following:
- 1) Must comply with all conditions of the ASP Request 15-T-AP,
 - 2) Must comply with all applicable requirements of NESHAP Subparts A and AA,
 - 3) Specifically notify the department the testing will be for establishing allowable ranges for this emissions unit according to NESHAP Subparts A and AA,
 - 4) All tests must be precisely conducted according to the MACT standards and all applicable test methods,

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection J. Emissions Unit 069

"D" Phosphoric Acid Plant

- 5) All tests must clearly demonstrate compliance with all MACT standards and applicable test methods and requirements,
- 6) All tests shall be submitted to the Department in accordance with NESHAP Subparts A and AA,
- 7) Failure to meet any requirements of this condition, NESHAP Subpart A or AA, or the alternate plan will negate use of any new ranges derived from the test.

[40 CFR 63, Subpart A; 40 CFR 63, Subpart AA; and, ASP Request 15-T-AP.]

NESHAP 40 CFR 63 Requirements

J.29. NESHAP 40 CFR 63 Requirements - Subpart A. This emissions unit shall comply with all applicable requirements of 40 CFR 63, Subpart A, General Provisions, which have been adopted by reference in Rule 62-204.800(11)(d)1., F.A.C., except that the Secretary is not the Administrator for purposes of 40 CFR 63.5(e), 40 CFR 63.5(f), 40 CFR 63.6(g), 40 CFR 63.6(h)(9), 40 CFR 63.6(j), 40 CFR 63.13, and 40 CFR 63.14. The applicable 40 CFR 63, Subpart A, General Provisions to which this emissions unit is subject to are found at 40 CFR 63.1 and are included in **Appendix 40 CFR 63 Subpart A**. [Rule 62-204.800(11)(d)1., F.A.C.]

J.30. NESHAP 40 CFR 63 Requirements - Subpart AA. This emissions unit shall comply with all applicable requirements of 40 CFR 63, Subpart AA, National Emission Standards for Hazardous Air Pollutants (NESHAP) from Phosphoric Acid Manufacturing Plants, which have been adopted by reference in Rule 62-204.800(11)(b)18., F.A.C. The applicable 40 CFR 63, Subpart BB, NESHAP from Phosphoric Acid Manufacturing Plants to which this emissions unit is subject to are found at 40 CFR 63.600 and are included in **Appendix 40 CFR 63, Subpart AA**. [Rule 62-204.800(11)(b)18., F.A.C.]

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SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection K. Emissions Unit 070 “C” and “D” Superphosphoric Acid Plants

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

EU No.	Brief Description
070	“C” and “D” Superphosphoric Acid Plants

Detailed Description:

This EU is comprised of the “C” & “D” Superphosphoric Acid (SPA) Plants. The combined design feed rate of the plants is 110 tons per hour equivalent P_2O_5 feed input.

Air Pollution Control Systems and Measures:

The “C” & “D” Superphosphoric Acid (SPA) Plants and east & west phosphoric acid storage tanks emit fluoride. The fluoride emissions are controlled by a scrubber.

Stack Parameters:

The stack exhaust gas characteristics are typically as follows: exhaust gas temperature of 95° F; exhaust gas flow rate 5,000 acfm; stack height of 60 ft; and, stack diameter of 3.6 feet.

{Permitting Notes: This emission unit is regulated under: NESHAP 40 CFR 63, Subpart AA - NESHAP From Phosphoric Acid Manufacturing Plants, adopted and incorporated by reference in Rule 62-204.800, F.A.C.; Rule 62-212.400, F.A.C., Prevention of Significant Deterioration [PSD-FL-297]; and, Rule 62-296.403, F.A.C., Phosphate Processing. Because compliance has been demonstrated with NESHAP 40 CFR 63, Subpart AA, this emissions unit is exempted from the requirements of NSPS, 40 CFR 60, Subpart U.}

Essential Potential to Emit (PTE) Parameters

K.1. Permitted Capacity. The combined operation rate shall not exceed the maximum daily 1-hour average rate of 110 tons of 100% P_2O_5 input. The operation rate shall not exceed 876,000 tons during any 12 consecutive months of 100% P_2O_5 input. [Rules 62-4.160(2) and 62-210.200, PTE, F.A.C.; and, Permit No. 0470002-034-AC & 0470002-039-AC/PSD-FL-297.]

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

K.3. Hours of Operation. This emissions unit may operate continuously (8,760 hours/year). [Rule 62-210.200, PTE, F.A.C.; and, 0470002-039-AC/PSD-FL-297.]

Emission Limitations and Standards

Unless otherwise specified, the averaging time(s) for Specific Condition **K.4. - K.5.** are based on the specified averaging time of the applicable test method.

K.4. Total Fluorides. Total fluoride emissions shall not exceed 0.0087 lb/ton of equivalent P_2O_5 feed for each processing line; “C” and “D.” [40 CFR 60.212(a); 40 CFR 63.601, 40 CFR 63.602(a)(1), and 0470002-039-AC/PSD-FL-297.]

K.5. Visible Emissions. Visible emissions shall not be equal to or greater than 20% opacity. [Rule 62-296.320(4)(b), F.A.C.]

Excess Emissions

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

K.6. Excess Emissions Allowed. Excess emissions resulting from startup, shutdown or malfunction of any emissions unit 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.]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection K. Emissions Unit 070 “C” and “D” Superphosphoric Acid Plants

K.7. 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.]

K.8. Excess Emissions Notification. In case of excess emissions resulting from a malfunction, the permittee shall immediately notify the Air Compliance Section of the Northeast District Office of the Department of Environmental Protection in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]

Monitoring of Operations

K.9. Phosphorus-Bearing Feed Material. The permittee shall install, calibrate, maintain, and operate a continuous monitoring system (CMS) according to your site-specific monitoring plan specified in 40 CFR 63.608(c), which can be used to determine and permanently record the mass flow of phosphorus-bearing feed material to the process. The continuous monitoring system (CMS) must have an accuracy of ± 5 percent over its operating range. [40 CFR 60.213(a) and 40 CFR 63.605(a)(1) & (2).]

K.10. P₂O₅ Feed. The Permittee shall maintain a daily record of equivalent P₂O₅ feed by first determining the total mass rate in Mg/hr of phosphorus-bearing feed using a flow monitoring device meeting the requirements of 40 CFR 60.214(a)&(b), and then by proceeding according to 40 CFR 60.214(b)(3). [40 CFR 60.213(b).]

K.11. Scrubber Pressure Drop. The Permittee shall install, calibrate, maintain, and operate a monitoring system which continuously measures and permanently records the pressure drop across each scrubber in the process scrubbing system in 15-minute block averages. The monitoring system shall be certified by the manufacturer to have an accuracy of ± 5 percent over its operating range. [40 CFR 60.213(c).]

K.12. Scrubber Monitoring Systems. 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.
- d. Liquid-to-gas Ratio, as applicable.
 - 1) A “liquid” 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 $\pm 5\%$ over its operating range.
 - 2) A “gas” monitoring system as outlined in Table 3 of Subpart AA of Part 63 - Monitoring Equipment Operating Parameters which permanently records the flow rate of the scrubbing gas to each applicable scrubber in the process scrubbing system in 15-minute block averages.

[40 CFR 63.625(d); and, ASP Request 15-T-AP.]

K.13. Scrubber Operating Parameters. In order to provide reasonable assurance that the fluoride emission limitation is being met, the permittee shall create and keep a record log of the scrubber operating parameters for each plant. The record log shall contain, at a minimum:

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

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection K. Emissions Unit 070 “C” and “D” Superphosphoric Acid Plants

- c. the date and time of the measurements, and
 - d. the name of the person responsible for performing the measurements.
- A log entry shall be made at least once for every shift (12 hours) that the Phosphoric Acid Plant operates. [Rules 62-4.070(1)&(3), 62-4.160(14)(b)&(c), and 62-213.440(b)2.b., F.A.C.]

{Permitting Note: The permittee may substitute continuous monitoring and strip chart recordings for the manual recordkeeping required by this specific condition.}

Test Methods and Procedures

- K.14. Fluorides Testing.** The permittee shall meet the 40 CFR 63 Subpart AA performance testing requirements stated in 40 CFR 63.606.

{Permitting Note: The facility requested yearly testing in lieu of the every five years due to compliance related issues. Only the every five year test applies to NESHAP Subpart AA requirement.}

[40 CFR 60.214, NSPS Subpart U; and Applicant Request dated October 29, 2015.]

- K.15. Annual Compliance Tests Required.** During each calendar year (January 1st to December 31st), emissions from the scrubber shall be tested to demonstrate compliance with the emissions standards for fluoride. [Rule 62-297.310(8), F.A.C; and, 40 CFR 63.606(b).]

- K.16. Test Methods.** When 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
13A	Determination of Total Fluoride Emissions from Stationary Sources - SPADNS Zirconium Lake Method
13B	Determination of Total Fluoride Emissions from Stationary Sources - Specific Ion Electrode Method

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 62-204.800, F.A.C.; and, 40 CFR 60, Appendix A.]

- K.17. Common Testing Requirements.** Unless otherwise specified, any 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.]

{Permitting Note: Air compliance test notifications can now be completed online in the Department's Business Portal. To access this online process, go to <http://www.fldepportal.com/go/home> and sign in (or register if you're a new user) from the link in the upper right corner of the page. On the Welcome page select the Submit option, then select Registration/Notification, and then click on Air Compliance Test Notifications. Once in the process, just carefully read the instructions on each screen (and under the Help tabs) to complete the notification.}

- K.18. Additional Compliance Test Requirements.** The following scrubber operating parameters shall be monitored and recorded during the compliance test and a summary of this data shall be included with the fluoride emissions test report:

- a. the water flow rate (gallons per minute);
- b. the scrubber pressure drop (inches of water); and
- c. the “equivalent P₂O₅ feed” rate.

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

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Subsection K. Emissions Unit 070 “C” and “D” Superphosphoric Acid Plants

[Rules 62-4.070(1)&(3), 62-4.160(14)(b), and 62-4.160(14)(c), F.A.C.]

Recordkeeping and Reporting Requirements

K.19. Daily Record. The permittee shall maintain a daily record of the equivalent P_2O_5 feed rate for the phosphoric acid plant according to the procedure specified in 40 CFR 60.203(b) - *Monitoring of Operations* and the following recordkeeping procedure:

- a. Facility Name, Facility ID No. (0470002), Emission Unit ID No. (E.U. 070) and Description;
- b. Date;
- c. Total hours of operation;
- d. Total equivalent P_2O_5 input, tons; and
- e. Equivalent P_2O_5 feed rate, tons P_2O_5 per hour.

Daily records shall be completed within 5 business days.

[Rule 62-4.070(1)&(3) F.A.C.; and, 40 CFR 60.213.]

K.20. Downtime Reporting Requirements. The monitoring devices required for the equivalent P_2O_5 feed rate and the total pressure drop measurement across the scrubber are considered inoperative when they are out-of-service or fail to produce valid data. Upon the occurrence of 48 consecutive hours of continuous monitoring system downtime, the permittee shall notify the Air Compliance Section, Northeast District Office of the Department by 5:00 p.m., or on the Department's next business day, of the incident and specify the corrective action being pursued. [Rule 62-4.130, F.A.C.]

K.21. Method of Calculating P_2O_5 Feed Rate. 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(f). [Rule 62-213.440(1)(b), F.A.C.; and, 40 CFR 63.605(b)(1).]

K.22. Notification Requirements. 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 includes the initial and annual performance test reports, excess emissions reports, and the summary report. [40 CFR 63.607.]

K.23. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

Other Requirements

K.24. Alternate Monitoring Methods. The permittee is subject to NESHAP alternate monitoring methods within ASP Request 15-T-AP - Alternate Monitoring Plan to that Required by 40 CFR 63 Subparts AA and BB dated 04/30/2015 (Attachment B); [40 CFR 63.632(a), ASP Request 15-T-AP.]

K.25. Determining Allowable Range of Scrubber Operation Parameters. 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 NESHAP Subpart AA 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(d) or (g). 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

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection K. Emissions Unit 070 “C” and “D” Superphosphoric Acid Plants

performance test. The baseline average values used for compliance shall be based on the values determined during the most recent performance test. The new baseline average value shall be effective on the date following the performance test.

- (2) The owner or operator of any new or existing affected source shall establish, and provide to the Administrator for approval, allowable ranges of baseline average values for the pressure drop across and of the flow rate of the scrubbing liquid to each scrubber in the process scrubbing system for the purpose of assuring compliance with this section. Allowable ranges may be based upon baseline average values recorded during previous performance tests using the test methods required in NESHAP Subpart AA and established in the manner required in § 63.606(d) or (g). As an alternative, the owner or operator can establish the allowable ranges of baseline average values using the results of performance tests conducted specifically for the purposes of this paragraph using the test methods required in NESHAP Subpart AA and established in the manner required in § 63.606(d) or (g). The source shall certify that the control devices and processes have not been modified subsequent to the testing upon which the data used to establish the allowable ranges were obtained. The allowable ranges of baseline average values developed pursuant to the provisions of this paragraph must be submitted to the Administrator for approval. The owner or operator must request and obtain approval of the Administrator for changes to the allowable ranges of baseline values. When a source using the methodology of this paragraph is retested, the owner operator shall determine new allowable ranges of baseline average values unless the retest indicates no change in the operating parameters from previous tests. Any new allowable ranges of baseline average values resulting from the most recent performance test shall be effective on the date following the retest. Until changes to allowable ranges of baseline average values are approved by the Administrator, the allowable ranges for use in § 63.604 shall be based upon the range of baseline average values proposed for approval.

[40 CFR 63.605(d).]

- K.26. Maintaining Allowable Range of Scrubber Operation Parameters.** On or after the date on which the initial performance (compliance) test is completed, the permittee shall maintain daily averages of the pressure drop across each scrubber and of the flow rate of the scrubbing liquid to each scrubber within the allowable ranges established pursuant to 40 CFR 63.605(d)(1) or (2). [40 CFR 63.605.]
- K.27. Monitoring Scrubber Operation.** To comply with § 63.605(d)(1) or (2), the owner or operator shall use the monitoring systems in § 63.605(c) to determine the average pressure loss of the gas stream across each scrubber in the process scrubbing system and to determine the average flow rate of the scrubber liquid to each scrubber in the process scrubbing system during each of the total fluoride runs. The arithmetic averages of the three runs shall be used as the baseline average values for the purposes of § 63.605(d)(1) or (2). [40 CFR 63.606(d).]
- K.28. Determination of Total Fluoride Emissions.** The permittee shall determine compliance with the total fluorides standard as required in 40 CFR 63.606(d), based on the equivalent P_2O_5 computed as indicated in 40 CFR 63.606(d)(3). [40 CFR 63.606(d).]
- K.29. Federal Rule Applicability.** This emission unit is subject to specific requirements of 40 CFR 63, Subpart AA, Appendix A to Subpart AA - Applicability to General Provisions to Subpart AA, and alternative MACT monitoring plan (ASP Request 15-T-AP - Alternate Monitoring Plan to that Required by 40 CFR 63 Subparts AA and BB dated 04/30/2015). The owner or operator is responsible for remaining in compliance with any updates made to NESHAP Subpart A or AA. To establish operating parameters for this emissions unit, the owner or operator must comply and demonstrate with the following:
- 1) Must comply with all conditions of the ASP Request 15-T-AP,
 - 2) Must comply with all applicable requirements of Part 63 Subparts A and AA,
 - 3) Specifically notify the Department the testing will be for establishing allowable ranges for this emissions unit according to Part 63 Subparts A and AA,

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

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- 4) All tests must be precisely conducted according to the MACT standards and all applicable test methods,
- 5) All tests must clearly demonstrate compliance with all MACT standards and applicable test methods and requirements,
- 6) All tests shall be submitted to the Department in accordance with Part 63 Subparts A and AA,
- 7) Failure to meet any requirements of this condition, Part 63 Subpart A or AA, or the alternate plan will negate use of any new ranges derived from the test.

[40 CFR 63, Subpart A; 40 CFR 63, Subpart AA; and, ASP Request 15-T-AP.]

NESHAP 40 CFR 63 Requirements

K.30. NESHAP 40 CFR 63 Requirements - Subpart A. This emissions unit shall comply with all applicable requirements of 40 CFR 63, Subpart A, General Provisions, which have been adopted by reference in Rule 62-204.800(11)(d)1., F.A.C., except that the Secretary is not the Administrator for purposes of 40 CFR 63.5(e), 40 CFR 63.5(f), 40 CFR 63.6(g), 40 CFR 63.6(h)(9), 40 CFR 63.6(j), 40 CFR 63.13, and 40 CFR 63.14. The applicable 40 CFR 63, Subpart A, General Provisions to which this emissions unit is subject to are found at 40 CFR 63.1 and are included in **Appendix 40 CFR 63 Subpart A**. [Rule 62-204.800(11)(d)1., F.A.C.]

K.31. NESHAP 40 CFR 63 Requirements - Subpart AA. This emissions unit shall comply with all applicable requirements of 40 CFR 63, Subpart AA, National Emission Standards for Hazardous Air Pollutants (NESHAP) from Phosphoric Acid Manufacturing Plants, which have been adopted by reference in Rule 62-204.800(11)(b)18., F.A.C. The applicable 40 CFR 63, Subpart BB, NESHAP from Phosphoric Acid Manufacturing Plants to which this emissions unit is subject to are found at 40 CFR 63.600 and are included in **Appendix 40 CFR 63, Subpart AA**. [Rule 62-204.800(11)(b)18., F.A.C.]

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SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection L. Emissions Unit 0701

Acid Clarification Plant

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

EU No.	Brief Description
071	Acid Clarification Plant

Detailed Description:

The Acid Clarification Plant utilizes a series of five (5) rotary drum filters and a belt filter to filter 48% P₂O₅ phosphoric acid prior to evaporation to superphosphoric acid.

Air Pollution Control Systems and Measures:

Fluoride emissions are controlled by a packed, counter-current, wet scrubber. Since the Synspar Plant has no air pollutant emissions, the limerock (LR) bin associated with this unit is included here for recordkeeping purposes. Particulate matter emissions from this bin are controlled by a bag collector.

Stack Parameters:

The stack exhaust gas characteristics are typically as follows: exhaust gas temperature of 95° F; exhaust gas flow rate 31,800 acfm; stack height of 60 ft; and, stack diameter of 3.6 feet.

{Permitting Notes: This emissions unit is regulated under Rule 62-212.400, F.A.C., Prevention of Significant Deterioration [PSD-FL-097], Best Available Control Technology dated February 28, 1978.}

Essential Potential to Emit (PTE) Parameters

- L.1. Permitted Capacity.** The process input rate shall not exceed the maximum daily 1-hour average rate of 110 tons 100% P₂O₅ input. The operating rate shall not exceed 876,000 tons during any 12 consecutive months of 100% P₂O₅ input. [Rules 62-4.160(2) and 62-210.200, PTE, F.A.C.; and, Permit Nos. 0470002-034-AC & 0470002-039-AC/PSD-FL-297.]
- L.2. Emissions Unit Testing.** See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]
- L.3. Hours of Operation.** This emissions unit may operate continuously (8,760 hours/year). [Rule 62-210.200, PTE, F.A.C.; and, Permit No. 0470002-039-AC/PSD-FL-297.]

Emission Limitations and Standards

Unless otherwise specified, the averaging time(s) for Specific Conditions **L.4. - L.5.** are based on the specified averaging time of the applicable test method.

- L.4. Fluoride Emissions - Scrubber.** Fluoride emissions shall not exceed 0.03 lb F/ton P₂O₅ input; 3.3 lbs/hr and 13.1 TPY. [Rule 62-210.200(42), F.A.C.; BACT from AC24-2722 issued 02/28/1978; and, Permit No. 0470002-039-AC/PSD-FL-297.]
- L.5. Visible Emissions - Limerock (LR) bin vent.** Visible emissions from the limerock (LR) bin vent shall not exceed 5% opacity. [Rule 62-297.620(4), F.A.C.]

Excess Emissions

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

- L.6. Excess Emissions Allowed.** Excess emissions resulting from startup, shutdown or malfunction of any emissions unit 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.]

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Subsection L. Emissions Unit 0701

Acid Clarification Plant

- L.7. 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.]
- L.8. Excess Emissions Notification.** In case of excess emissions resulting from a malfunction, the permittee shall immediately notify the Air Compliance Section of the Northeast District Office of the Department of Environmental Protection in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]

Test Methods and Procedures

- L.9. Fluoride Emissions - Scrubber.** The fluoride emissions stack test method shall be EPA Method 13A or 13B, incorporated and adopted by reference in Chapter 62-204.800, F.A.C. and shall be performed once every calendar year (January 1 - December 31). [Rule 62-297.310(8)(a), F.A.C.]
- L.10. Visible Emissions - Limerock (LR) bin vent.** The visible emissions test method shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-204.800, F.A.C. and shall be performed once every calendar year (January 1 - December 31). [Rule 62-297.310(8)(a), F.A.C.]

- L.11. Test Methods.** When 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
9	Visual Determination of the Opacity of Emissions from Stationary Sources
13A	Determination of Total Fluoride Emissions from Stationary Sources - SPADNS Zirconium Lake Method
13B	Determination of Total Fluoride Emissions from Stationary Sources - Specific Ion Electrode Method

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 62-204.800, F.A.C.; and, 40 CFR 60, Appendix A.]

{Permitting Note: During opacity testing, Rule 62-297.310(3)(b), F.A.C does not apply. Rule 62-297.310(5)(b), F.A.C. shall apply during opacity test observation period. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. See Appendix TR, Conditions TR.2 and TR.4.}

- L.12. Common Testing Requirements.** Unless otherwise specified, any 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.]

{Permitting Note: Air compliance test notifications can now be completed online in the Department's Business Portal. To access this online process, go to <http://www.fldepportal.com/go/home> and sign in (or register if you're a new user) from the link in the upper right corner of the page. On the Welcome page select the Submit option, then select Registration/Notification, and then click on Air Compliance Test Notifications. Once in the process, just carefully read the instructions on each screen (and under the Help tabs) to complete the notification.}

Recordkeeping and Reporting Requirements

- L.13. Other Reporting Requirements.** See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

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Subsection L. Emissions Unit 0701

Acid Clarification Plant

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Proposed

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection M. Emission Units 072

Molten Sulfur System for “E” and “F” Sulfuric Acid Plants

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

EU No.	Brief Description
072	Molten Sulfur System for “E” and “F” Sulfuric Acid Plants

Detailed Description:

The Molten Sulfur System for the “E” & “F” Sulfuric Acid Plants consists of a rail & truck unloading system with the following emission points: 1) RP - receiving pit; 2) FP - feed pit; 3) S1 - storage tanks vents (1-7); and, 4) S2 - storage tanks vents (1-7).

Air Pollution Control Systems and Measures:

This EU has no control equipment.

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

Essential Potential to Emit (PTE) Parameters

M.1. Permitted Capacity. The rate shall not exceed the maximum 12-monthly rolling average (MRA) hourly rate of 75.0 tons of throughput or maximum daily 1-hour average rate of 82.5 tons throughput. The 12-MRA hourly rate maximum shall not be exceeded by the 12-MRA hourly rate calculated by averaging each monthly hourly average with the previous 11 monthly hourly averages. The throughput rate corresponds to the sulfur feed rate to the “E” and “F” sulfuric acid plants with each plant operating at a production rate of 2,750 tons per day, 100% sulfuric acid. [Rules 62-4.160(2) and 62-210.200, PTE, F.A.C.; and, Permit Nos. 0470002-034-AC & 0470005-009-AO & 0470002-122-AC.]

M.2. Hours of Operation. This emissions unit may operate continuously (8,760 hours/year). [Rule 62-210.200, PTE, F.A.C.]

Emission Limitations and Standards

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

M.3. ~~VE Standard.~~ ~~As determined by EPA Method 9, visible emissions from any emissions point in the molten sulfur facility shall not exceed 20% opacity (6 minute average). [Rule 62-213.440(1), F.A.C.]~~

~~*{Permitting Note: VE testing is only required upon special request.}*~~

Excess Emissions

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

M.4. Excess Emissions Allowed. Excess emissions resulting from startup, shutdown or malfunction of any emissions unit 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.]

M.5. 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.]

M.6. Excess Emissions Notification. In case of excess emissions resulting from a malfunction, the permittee shall immediately notify the Compliance Assurance Program (CAP) of the Northeast District Office of the Department of Environmental Protection in accordance with Rule 62-4.130, F.A.C. A full written report on

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection M. Emission Units 072 Molten Sulfur System for “E” and “F” Sulfuric Acid Plants

the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]

Test Methods and Procedures

M.7. VE Testing. The visible emissions test method shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-204.800, F.A.C. [Rule 62-213.440(1), F.A.C.]

M.8. Test Methods. When required, tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
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 62-204.800, F.A.C.; and, 40 CFR 60, Appendix A.]

M.9. Common Testing Requirements. Unless otherwise specified, any 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.]

{Permitting Note: Air compliance test notifications can now be completed online in the Department's Business Portal. To access this online process, go to <http://www.fldepportal.com/go/home> and sign in (or register if you're a new user) from the link in the upper right corner of the page. On the Welcome page select the Submit option, then select Registration/Notification, and then click on Air Compliance Test Notifications. Once in the process, just carefully read the instructions on each screen (and under the Help tabs) to complete the notification.}

Recordkeeping and Reporting Requirements

M.10. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

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SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection N. Emissions Unit 075 Relocatable Concrete Batch Plant

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

EU No.	Brief Description
075	Relocatable Concrete Batch Plant

Detailed Description:

The entire concrete batch plant and auxiliary equipment is trailer mounted for ease of movement. Aggregate and cement may be received in bags and/or by truck. Raw materials are stored in bins, transferred via screw conveyor to a dry blender, and then fed with water to the mixing truck(s). The trucks deliver the concrete to a staging area where it is pumped to the desired location.

Auxiliary equipment includes a diesel engine generator, diesel engine power screen, and a diesel engine air compressor. The diesel engines fires ultra-low sulfur No. 2 fuel oil with a maximum sulfur content of 15 ppm.

Air Pollution Control Systems and Measures:

The storage bin and dry blender shall be equipped with a cartridge filter for particulate matter emissions control.

{Permitting Note: This emissions unit is regulated under Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards and Rule 62-296.414, Concrete Batching Plants, F.A.C.}

Essential Potential to Emit (PTE) Parameters

- N.1. Permitted Capacity.** The plant has a capacity of producing 120 cubic yards (ft³) of concrete per hour. The plant will be restricted to a maximum production of concrete, while at this facility, of 120,000 cubic yards per year. [Rules 62-4.160(2) and 62-210.200, Definitions - Potential to Emit (PTE), F.A.C.; and Permit No. 0470002-074-AC.]
- N.2. Emissions Unit Testing.** See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]
- N.3. Hours of Operation.** This emissions unit may operate continuously (8,760 hours/year). [Rule 62-210.200, PTE, F.A.C.]

Monitoring of Operations

- N.4. Baghouses.** The cement and cement additive silo(s) shall be equipped with high efficiency dust collections devices (baghouses). The baghouses shall be operated at all times that the silo(s) are in operation. [Permit No. 0470002-074-AC.]

Emission Limitations and Standards

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

- N.5. Visible Emissions (VE).** Emissions from silos, weigh hoppers (batchers), and other enclosed storage and conveying equipment shall be controlled to the extent necessary to limit visible emissions to 5 percent opacity. [Rule 62-296.414(1), F.A.C.]
- N.6. Unconfined Emissions.** The owner or operator shall take reasonable precautions to control unconfined emissions from hoppers, storage and conveying equipment, conveyor drop points, truck loading and unloading, and unpaved roads. The following shall constitute reasonable precautions:
- Management of unpaved roads which shall include the following:
 - Wetting of unpaved roads used while the emission unit is in operation will be required twice daily unless rainfall or previous wetting has eliminated visible fugitive road dust emissions.
 - Reduce truck speeds as necessary to minimize visible dust from truck traffic.

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection N. Emissions Unit 075 Relocatable Concrete Batch Plant

- b. Use of spray bar, chute, or partial enclosure to mitigate emissions at the material drop point into the truck.

[Rule 62-296.320(4)(c), Rule 62-296.414(2), F.A.C.]

Excess Emissions

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

- N.7. Excess Emissions Allowed.** Excess emissions resulting from startup, shutdown or malfunction of any emissions unit 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.]
- N.8. 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.]
- N.9. Excess Emissions Notification.** In case of excess emissions resulting from a malfunction, the permittee shall immediately notify the Air Compliance Section of the Northeast District Office of the Department of Environmental Protection in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]

Test Methods and Procedures

- N.10. VE Test.** The visible emissions test method shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-204.800, F.A.C. Testing shall be conducted at the dust control emission point (EP), including but limited to the storage silo(s) and the blender. Testing at each EP shall be performed while loading a tanker truck into the silo and loading material into the blender respectively. [Rules 62-4.070(1)&(3), 62-213.420(1)(a)3. and 62-297.310 F.A.C.]
- N.11. Frequency of VE Testing.** A VE test shall be conducted once every calendar year (January 1 - December 31). This annual VE test shall not be required should the unit be operational for a total of less than 400 hours during the year. [Rule 62-296.414(4)(b), F.A.C.]
- N.12. VE Tests.** Visible emissions tests of silo dust collector exhaust points shall be conducted while loading the silo at a rate that is representative of the normal silo loading rate. The minimum loading rate shall be 25 tons per hour unless such rate is unachievable in practice. If emissions from the weigh hopper (batcher) operation are also controlled by the silo dust collector, the batching operation shall be in operation during the visible emissions test. The batching rate during the emissions test shall be representative of the normal batching rate and duration. Each test report shall state the actual silo loading rate during emissions testing and, if applicable, whether or not batching occurred during emissions testing. [Rule 62-296.414(3)(c), F.A.C.]
- N.13. VE Tests.** If emissions from the weigh hopper (batcher) operation are controlled by a dust collector which is separate from the silo dust collector, visible emissions tests of the weigh hopper (batcher) dust collector exhaust point shall be conducted while batching at a rate that is representative of the normal batching rate and duration. Each test report shall state the actual batching rate during emissions testing. [Rule 62-296.414(3)(d), F.A.C.]
- N.14. Test Methods.** When required, tests shall be performed in accordance with the following reference methods:

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

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection N. Emissions Unit 075 Relocatable Concrete Batch Plant

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 62-204.800, F.A.C.; and, 40 CFR 60, Appendix A.]

{Permitting Note: During opacity testing, Rule 62-297.310(3)(b), F.A.C does not apply. Rule 62-297.310(5)(b), F.A.C. shall apply during opacity test observation period. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. See Appendix TR, Conditions TR.2 and TR.4.}

N.15. Common Testing Requirements. Unless otherwise specified, any 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.]

{Permitting Note: Air compliance test notifications can now be completed online in the Department's Business Portal. To access this online process, go to <http://www.fldepportal.com/go/home> and sign in (or register if you're a new user) from the link in the upper right corner of the page. On the Welcome page select the Submit option, then select Registration/Notification, and then click on Air Compliance Test Notifications. Once in the process, just carefully read the instructions on each screen (and under the Help tabs) to complete the notification.}

Recordkeeping and Reporting Requirements

N.16. Records. The permittee shall maintain daily records of the amount of wetting of the haul road including number of applications, approximate quantity of water applied, and reason if less than two applications of water were applied daily. These records shall be made available to the Department upon request. [Rule 62-212.300 and 62-4.070(1)&(3), F.A.C.]

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

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SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection O. Emission Units 076

128 Emergency Engines

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

EU No.	Brief Description
076	128 Emergency Engines

This subsection of the permit is comprised of engines, some of which power emergency generators. Engines in this subsection are grouped by similar engine type as regulated by EPA.

{Permitting Notes: These emissions units, engines, are regulated under 40 CFR 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (RICE) adopted in Rule 62-204.800(11)(b), F.A.C. The “new” engines must meet either 40 CFR 60, Subpart IIII, NSPS for Compression Ignition Internal Combustion Engines (CI ICE) or Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (SI ICE). The permittee identified numerous other non-road engines (portable) located at the facility; these engines are not regulated under 40 CFR 63, Subpart ZZZZ.}

Detailed Descriptions:

Generator Location	Facility Asset Number	Permit Engine ID	Manufacturer	Model No.	Serial No.	Fuel Usage Type	Rating	
							KW	HP ⁽²⁾
SRC - SRC Security Building	#2668	TBD	Generac	RD01523ADAE	3003251290	Natural Gas	20	27
SRC - SRC Radio Tower	#2707	TBD	Generac	G0070351	3004239503	Propane	25	34
SCM - SCM Radio Tower	#2246	EU 076, Engine No. 15	CUMMINS	9CEXS03.02PA ⁽⁴⁾	H090023424 ⁽⁴⁾	Propane	48	64
Main Admin. Potable Well	#2682	TBD	Kohler	SGM32M9DC	400REOZJB-CP1	Diesel	150	201
SCC - SCC Liming Station	#016	TBD	DETROIT	DDC 215	06A0456376	Diesel	215	288
SCC - SCC Potable Well	#2608	EU 076, Engine No. 17	GENERAC	RE05034KBSE	8701320	Diesel	40	54
SCC - SCC Guard Shack	#2607	EU 076, Engine No. 18	GENERAC	RD02023AD	9473339	Diesel	20	27
SCC - SCC Admin.	#1593	EU 076, Engine No. 6	CAT	3208	30A03399	Diesel	150	201

Below is a summary of how the **128** emergency engines are regulated by specific EPA regulations:

Emergency Engines

Engine No.(s) 1-4, 6-8, and 14 are subject to regulation under **40 CFR 63, Subpart ZZZZ** National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

Emergency Engines

Engine No.(s) 15 and 16 are subject to regulation under **40 CFR 60, Subpart JJJJ** Standards of Performance for Stationary Spark Ignition Internal Combustion Engines.

Emergency Engines

Engine No.(s) 17 and 18 are subject to regulation under **40 CFR 60, Subpart IIII** Standards of Performance for Stationary Compression Ignition Internal Combustion Engines. Manufacturer placed a label on the units to certify that the engines meet the applicable federal emissions requirements.

A detailed description for each engine follows:

Engine No. 1: Mobile diesel generator Aux set (#3 D/L), manufactured by Allis Chalmers, Model # 2900 MK1, Serial # D2 117976.

Engine No. 2: Mobile diesel generator Aux set (#2 D/L), manufactured by John Deere, Model #6329DF 01, Serial #337375T.

Engine No. 3: Mobile diesel generator Aux set (#4 D/L), manufactured by Allis Chalmers, Model #2900MK1, Serial # D275931.

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Engine No. 4: DieselELEC (#54 D/L), manufactured by Allis-Chamers, Model #8900MK1, Serial # 1-7451-2D759110.

Engine No. 6: DieselEngine STA 150 KW, manufactured by CAT, Model #3208, Serial # 30A03399.

Engine No. 7: DieselMurphy/lima 75-13846, manufactured by Perkins, Model #LJ-33478, Serial # U428363U.

Engine No. 8: DieselKatolight D500FRV4, manufactured by VOLVO, Model #TAD1631G, Serial # 2160034028.

Engine No. 14: 330 HP emergency use diesel MOBILE ENGINE, FIRE PUMP, built in 2004, manufactured by CAT, Model #3126, Serial # CKK00307.

Engine No. 15: LPG Auxiliary power for radio equipment, manufactured by GM3.0L, Model #9CEXS03.0 2PA, Serial # H090023423.

Engine No. 16: LPG Auxiliary power for radio equipment SCM, manufactured by GM3.0L, Model #9CEXS03.0 2PA, Serial # H090023424.

Engine No. 17: Emergency Use Diesel mobile engine, year build/manufactured in 2014, manufactured by GENERAC. The Engine Model No. is D3400T, and the Generator's Model No. is RD020234KDSE, Serial No. 8701320.

Engine No. 18: Emergency Use Diesel engine, year build/manufactured in 2015, manufactured by GENERAC. The Engine Model No. is A2300, and the Generator's Model No. RD02023ADAE, Serial No. 9473339.

The following table provides important additional details for Engine Nos. 1-4, 6-8, 10, 14-18:

Engine	Equip #	Group-Code 2	Plant	Displacement (L/cyl)	HP	Year Built/Manufactured	Use
1	000005	M04 Light Plant G	SCM	301-CID	100	1974	Limited
2	000009	M04 Light Plant G	SCM	380-CID	100	1974	Limited
3	000012	M04 Light Plant G	SCM	301-CID	100	1975	Limited
4	000014	M04 Light Plant G	SCM	301-CID	100	1975	Limited
6	000533	M04 Light Plant G	SRC	636-CID	250	1988	Limited
7	001026	M04 Light Plant G	SCC	3.9-L	100	1998	Emergency
8	001106	M04 Light Plant G	SRC	16.1-L	200	1999	Limited
14	001715	997 Other, mobile	SCM	7.2-L	330	2004	Emergency
15	002245	M04 Light Plant G	SCR	3.0-L	64	2009	Emergency
16	002246	M04 Light	SCM	3.0-L	64	2009	Emergency

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		Plant G					
17	Asset #2608		SRC	3.4 L	67	2014	Emergency
18	Asset #2607		SCC	3.4 L	27	2015	Emergency

Generator Location	Facility Asset Number	Permit Engine ID	Manufacturer	Model No.	Serial No.	Ignition Type (SPARK or COMPRESSION)	Date of Construction/Modification/Reconstruction	Subject to 40 CFR 63, Subpart ZZZZ (Y / N)	Subject to 40 CFR 60, Subpart IIII (Y / N)	Subject to 40 CFR 60, Subpart IIII (Y / N)
SRC - SRC Security Building	#2668	TBD	Generac	RD01523ADAE	3003251290	SPARK	Post-dates 2014	Y ⁽¹⁾	N ⁽²⁾	Y ⁽³⁾
SRC - SRC Radio Tower	#2707	TBD	Generac	G0070351	3004239503	SPARK	Post-dates 2014	Y ⁽¹⁾	N ⁽²⁾	Y ⁽³⁾
SCM - SCM Radio Tower	#2346	EU 076, Engine No. 15	CUMMINS	9CEX503.02PA ⁽⁴⁾	H090023424 ⁽⁵⁾	SPARK	2009	Y ⁽¹⁾	N ⁽²⁾	Y ⁽³⁾
Main Admin. Potable Well	#2682	TBD	Kohler	SGM32M9DC	400RE02B-CP1	COMPRESSION	Post-dates 2014	Y ⁽¹⁾	Y ⁽⁴⁾	N ⁽⁷⁾
SCC - SCC Liming Station	#016	TBD	DETROIT	DDC 215	06A0456376	COMPRESSION	Pre-dates 2006	Y ⁽²⁾	N ⁽²⁾	N ⁽⁷⁾
SCC - SCC Potable Well	#2608	EU 076, Engine No. 17	GENERAC	RE05034K85E	8701320	COMPRESSION	2014	Y ⁽¹⁾	Y ⁽⁴⁾	N ⁽⁷⁾
SCC - SCC Guard shack	#2607	EU 076, Engine No. 18	GENERAC	RD02023AD	9473339	COMPRESSION	2015	Y ⁽¹⁾	Y ⁽⁴⁾	N ⁽⁷⁾
SCC - SCC Admin.	#1593	EU 076, Engine No. 6	CAT	320B	30A03399	COMPRESSION	1988	Y ⁽²⁾	N ⁽²⁾	N ⁽⁷⁾

Existing Stationary RICE (Engines 1-4, 6-8, and 14)

O.1. Pursuant to 40 CFR 63 Subpart ZZZZ (63.6590(a)(1)(ii)) for an Existing stationary RICE at major source that was constructed before June 12, 2006. An existing stationary CI RICE located at a major source of HAP emissions, the permittee must comply with the applicable emission limitations and operating limitations ~~no later than May 3, 2013.~~ [40 CFR 63.6590(a)(1)(ii).]

GENERAL REQUIREMENTS

O.2. (a) The Permittee must be in compliance with the emission limitations and operating limitations in this section that apply to the Permittee at all times.

(b) At all times the Permittee 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 the Permittee 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.]

O.3. Table 2c to Subpart ZZZZ of Part 63 - Requirements for Existing Compression Ignition Stationary RICE Located at a Major Source of HAP Emissions¹:

- Change oil and filter every 500 hours of operation or annually, whichever comes first;²
- Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first;
- Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.³

During periods of startup the Permittee must 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

¹If 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 this section, 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

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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.

²Sources have the option to utilize an oil analysis program as described in 40 CFR 63.6625(i) in order to extend the specified oil change requirement in Table 2c of NESHAP Subpart ZZZZ.

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

[75 FR 51593, Aug. 20, 2010]

O.4. No testing is required as per Tables 3-5. In accordance with 40 CFR 63.6625(e)(2), the facility 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(f), the facility must install a non-resettable hour meter if one is not already installed. 40 CFR 63.6625(h), the facility 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. 40 CFR 63.6625(i), the facility has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c.

O.5. In accordance with 40 CFR 63.6635, the facility must:

- (a) If the Permittee must comply with emission and operating limitations, the Permittee must monitor and collect data according to this section.
- (b) Except for monitor malfunctions, associated repairs, required performance evaluations, and required quality assurance or control activities, the Permittee must monitor continuously at all times that the stationary RICE is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.
- (c) The Permittee may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. The Permittee must, however, use all the valid data collected during all other periods.

No notification is required as per 40 CFR 63.6645(a)(5); 40 CFR 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h).

New Stationary Spark Ignition Internal Combustion Engines (SI ICE) - 40 CFR 60 Subpart JJJJ (Engines 15 & 16)

Some Engines ~~No. (s)~~ **15 & 16** are subject to regulation under 40 CFR 60, Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

GENERAL REQUIREMENTS

This section applies to owners and operators of stationary SI ICE that commence construction on or after January 1, 2009, for emergency engines with a maximum engine power greater than 19 KW (25 HP).

EMISSION STANDARDS FOR OWNERS AND OPERATORS

O.6. Owners and operators of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) manufactured on or after the applicable date in January 1, 2009 that are rich burn engines that use LPG must comply with the emission standards in 40 CFR 60.4231(c) for their stationary SI ICE (Phase 1 emission

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standards in 40 CFR 90.103, applicable to class II engines, and other requirements for new nonroad SI engines in 40 CFR part 90).

40 CFR 90.103 (Table 3 - Phase 2 Class II) Engine Exhaust Emission Standards by Model Year

[Grams per kilowatt-hour]

Model Year						
Engine Class	Emission requirement	2001	2002	2003	2004	2005 and later
II	HC +NO _x	18.0	16.6	15.0	13.6	12.1
	NMHC+NO _x	16.7	15.3	14.0	12.7	11.3
	CO	610	610	610	610	610

[40 CFR 60.4231(c); 40 CFR 60.4233(c) and 40 CFR 90.103]

O.7. Any of the engines may be replaced by a like-kind units, as needed. The permittee shall comply with the applicable requirements under 40 CFR 63, Subpart ZZZZ & 40 CFR 60 Subpart JJJJ and include the information on the units in the subsequent revision or renewal application (whichever comes first), but no later than 180 days after the emissions unit commences operation or commences operation as modified. [Rule 62-213.420(1)(a)3. F.A.C.]

New Stationary Compression Ignition Internal Combustion Engines (CIICE) (Models Years After 2007) - 40 CFR 60 Subpart IIII (Engine Nos. 17 and 18)

Some Engines **No.(s) 17 and 18** are subject to regulation under 40 CFR 63, Subpart ZZZZ- National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines; and 40 CFR 60, Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines. Manufacturer placed a label on the units to certify that the engines meet the applicable federal emissions requirements.

O.8. Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the criteria in (c)(1) through (7) of 40 CFR 63.6590 must meet the requirements of 40 CFR 63, Subpart ZZZZ by meeting the requirements of 40 CFR Part 60 Subpart IIII, for compression ignition engines. No further requirements apply for such engines under 40 CFR Part 60. [40 CFR 63.6590(c)]

O.9. New Engines Nos. 17 and 18 (Models Years After 2007). 2007 model year and later emergency stationary CIICE with a displacement of less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards for new nonroad CI engines in 40 CFR 60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE. [40 CFR 60.4205(b)]

O.10. ~~The facility must certify their 2007 model year and later emergency stationary CIICE with a maximum engine power less than or equal to 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder that are not fire pump engines to the emission standards specified in (a)(1) through (2) of this Specific Condition.~~

~~(1) Engine No. 18: For engines with a maximum engine power less than 37 KW (50 HP):~~

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(i) The certification emission standards for new nonroad CI engines for the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants for model year 2007 engines, and

(ii) The certification emission standards for new nonroad CI engines in 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, 40 CFR 1039.115, and Table 2, for 2008 model year and later engines.

(2) **Engine No. 17:** For engines with a maximum engine power greater than or equal to 37 KW (50 HP), the certification emission standards for new nonroad CI engines for the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants beginning in model year 2007.

Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder that are not fire pump engines to the emission standards specified in paragraphs (a)(1) through (2) of this section.

(1) For engines with a maximum engine power less than 37 KW (50 HP):

(i) The Tier 2 emission standards for new nonroad CI engines for the appropriate rated power as described in 40 CFR part 1039, appendix I, for all pollutants and the smoke standards as specified in 40 CFR 1039.105 for model year 2007 engines; and

(ii) The certification emission standards for new nonroad CI engines in 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, 40 CFR 1039.115, and table 2 to this subpart, for 2008 model year and later engines.

(2) For engines with a rated power greater than or equal to 37 KW (50 HP), the Tier 2 or Tier 3 emission standards for new nonroad CI engines for the same rated power as described in 40 CFR part 1039, appendix I, for all pollutants and the smoke standards as specified in 40 CFR 1039.105 beginning in model year 2007.

[40 CFR 60.4202(a)]

O.11. The facility must operate and maintain stationary CI ICE that achieve the emission standards as required in 40 CFR 60.4204 and 40 CFR 60.4205 over the entire life of the engine. [40 CFR 60.4206]

FUEL REQUIREMENTS FOR OWNERS AND OPERATORS

O.12. Beginning October 1, 2007, owners and operators of stationary CI ICE that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(a). [40 CFR 60.4207(a)]

O.13. Beginning October 1, 2010, owners and operators of stationary CI ICE 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 nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted. [40 CFR 60.4207(b)]

O.14. After December 31, 2009, owners and operators may not install stationary CI ICE with a maximum engine power of less than 19 KW (25 HP) (excluding fire pump engines) that do not meet the applicable requirements for 2008 model year engines. [40 CFR 60.4208(a)]

O.15. In addition to the requirements specified in 40 CFR 60.4202, it is prohibited to import stationary CI ICE with a displacement of less than 30 liters per cylinder that do not meet the applicable requirements after the dates specified in (b) of **Specific Condition O.14**. [40 CFR 60.4208(h)]

O.16. An emergency stationary CI internal combustion engine that does not meet the standards applicable to non-emergency engines, you must install a non-resettable hour meter prior to startup of the engine. [40 CFR 60.4209]

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COMPLIANCE REQUIREMENTS

- O.17.** Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions;
- (1) Change only those emission-related settings that are permitted by the manufacturer; and
 - (2) Meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you.
- [40 CFR 60.4211(a)(1)-(3)]
- O.18.** The facility must comply by purchasing an engine certified to the emission standards in 40 CFR 60.4205(b), as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in **Specific Condition No. O.20.** [40 CFR 60.4211(c)]
- O.19.** The facility must operate the emergency stationary ICE according to the requirements in (1) through (3) of this **Specific Condition**. In order for the engine to be considered an emergency stationary ICE under 40 CFR 60, Subpart IIII, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in (1) through (3) of this **Specific Condition**, is prohibited. If you do not operate the engine according to the requirements in (1) through (3) of this **Specific Condition**, the engine will not be considered an emergency engine under 40 CFR 60, Subpart IIII and must meet all requirements for non-emergency engines.
- (1) There is no time limit on the use of emergency stationary ICE in emergency situations.
 - (2) You may operate your emergency stationary ICE for any combination of the purposes specified in (2)(i) through (iii) of this **Specific Condition** for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by (3) of this **Specific Condition** counts as part of the 100 hours per calendar year allowed by (2).
 - (i) Emergency stationary ICE 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 ICE beyond 100 hours per calendar year.
 - (ii) Emergency stationary ICE 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 §60.17), 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 ICE 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 ICE 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 (2) of this **Specific Condition**. Except as provided in (3)(i) of this **Specific Condition**, the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand

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response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

- (i) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:
 - (A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;
 - (B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
 - (C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
 - (D) The power is provided only to the facility itself or to support the local transmission and distribution system.
 - (E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

[40 CFR 60.4211(f)(1) – (3)(i)(A) – (E)]

O.20. If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must demonstrate compliance as follows:

- (1) If you are an owner or operator of a stationary CI internal combustion engine with maximum engine power less than 100 HP, you must keep a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, if you do not install and configure the engine and control device according to the manufacturer's emission-related written instructions, or you change the emission-related settings in a way that is not permitted by the manufacturer, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of such action.
- (2) If you are an owner or operator of a stationary CI internal combustion engine greater than or equal to 100 HP and less than or equal to 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer.

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- (3) If you are an owner or operator of a stationary CI internal combustion engine greater than 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer. You must conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards.

[40 CFR 60.4211(g)]

NOTIFICATION, REPORTS, AND RECORDS FOR OWNERS AND OPERATORS

- O.21.** If the stationary CI internal combustion engine is an emergency stationary internal combustion engine, the owner or operator is not required to submit an initial notification. Starting with the model years in Table 5, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time. [40 CFR 60.4214(b)]
- O.22.** 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(c)]

GENERAL REQUIREMENTS

- O.23.** Table 8 to 40 CFR 60, Subpart IIII shows which parts of the General Provisions in 40 CFR 60.1 through 40 CFR 60.19 apply. [40 CFR 60.4218]

Test Methods and Procedures

- O.24.** Common Testing Requirements. Any tests, if required, 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.]

Recordkeeping and Reporting Requirements

- O.25.** Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

NESHAP 40 CFR 63, Subpart A & ZZZZ Requirements

- O.26.** (applies to all Engines **1-4, 6-8, 10, and 14**) 40 CFR 63 Requirements - Subpart A. These emissions units shall comply with all applicable requirements of 40 CFR 63, Subpart A, General Provisions, which have been adopted by reference in Rule 62-204.800(11)(d)1., F.A.C. and attached to this permit as **Appendix 40 CFR 63 Subpart A**, except that the Secretary is not the Administrator for purposes of 40 CFR 63.5(e), 40 CFR 63.5(f), 40 CFR 63.6(g), 40 CFR 63.6(h)(9), 40 CFR 63.6(j), 40 CFR 63.13, and 40 CFR 63.14. The applicable 40 CFR 63, Subpart A, General Provisions to which these emissions are subject to are found at 40 CFR 63.6665. [Rule 62-204.800(11)(d)1., F.A.C.]
- O.27.** (applies to all Engines **1-4, 6-8, 10, and 14**) 40 CFR 63 Requirements - Subpart ZZZZ. These emissions units shall comply with all applicable requirements of 40 CFR 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE),

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which have been adopted by reference in Rule 62-204.800(11)(b), F.A.C., and attached to this permit as **Appendix 40 CFR 63 Subpart ZZZZ** [Rule 62-204.800(11)(b), F.A.C.]

NSPS 40 CFR 60, Subpart A, IIII & JJJJ Requirements

- O.28. (applies to all NSPS Subpart IIII & JJJJ engines)** **NSPS 40 CFR 60 Requirements - Subpart A.** These engines shall comply with all applicable requirements of 40 CFR 60, Subpart A, General Provisions including:
40 CFR 60.7, Notification and Recordkeeping
40 CFR 60.8, Performance Tests
40 CFR 60.11, Compliance with Standards and Maintenance Requirements
40 CFR 60.12, Circumvention
40 CFR 60.13, Monitoring Requirements
40 CFR 60.19, General Notification and Reporting requirements
adopted by reference in Rule 62-204.800(8)(c), F.A.C. and attached to this permit as **Appendix 40 CFR 60 Subpart A**, except that the Secretary is not the Administrator for purposes of 40 CFR 60.4, 40 CFR 60.8(b)(2) and (3), 40 CFR 60.11(e)(7) and (8), 40 CFR 60.13(g), (i) and (j)(2), and 40 CFR 60.16. [Rule 62-204.800(8)(d), F.A.C.]
- O.29. (applies to all NSPS Subpart IIII engines - Engine Nos. 17 and 18)** **40 CFR 60 Requirements - Subpart IIII.** These engines shall comply with all applicable requirements of 40 CFR 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, which have been adopted by reference in Rule 62- 204.800(8)(b), F.A.C., and attached to this permit as **Appendix 40 CFR 60 Subpart IIII**. [Rule 62-204.800(8)(b), F.A.C.]
- O.30. (applies to all NSPS Subpart JJJJ engines - Engine Nos. 17 and 18)** **40 CFR 60 Requirements - Subpart JJJJ.** These engines shall comply with all applicable requirements of 40 CFR 60, Subpart JJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines, which have been adopted by reference in Rule 62-204.800(8)(b), F.A.C., and attached to this permit as **Appendix 40 CFR 60 Subpart JJJJ**. [Rule 62-204.800(8)(b), F.A.C.]

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Emergency Rental Boiler

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

EU No.	Brief Description
077	Emergency Rental Boiler

Detailed Description:

This EU is a rental steam generating boiler with a design capacity of up to 155 MMBtu/hour maximum. The permittee is authorized to have onsite this rental, steam generating unit for emergency use.

Air Pollution Control Systems and Measures:

This EU has no control equipment.

Stack Parameters:

Emissions from this boiler are exhausted through a vertical stack which is 20 feet tall and it has an exit diameter of 0.7 feet.

{Permitting Notes: This emission unit is regulated under Rule 62-296.406, F.A.C., Fossil Steam Generators with Less Than 250 Million Btu Per Hour Heat Input, New and Existing Emission Units; and, 40 CFR 60, Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, adopted and incorporated by reference in Rule 62-204.800, F.A.C. 40 CFR 60, Subpart Dc imposes only a recordkeeping requirement.}

Essential Potential to Emit (PTE) Parameters

- P.1. Permitted Capacity.** The rental steam generating unit shall be limited to a maximum heat input rate of 155 MMBtu per hour. [Rule 62-210.200, Definitions - PTE, F.A.C.; and, Permit No. 0470002-082-AC.]
- P.2. Emissions Unit Testing.** See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]
- P.3. Methods of Operation - Fuel.** The steam generating unit shall fire either natural gas or low sulfur distillate (No. 2) fuel oil. The maximum sulfur content of the low sulfur No. 2 fuel oil shall not exceed 0.05 percent by weight. [Rule 62-210.200, PTE & 62-296.406(2) & (3), F.A.C.; Permit No. 0470002-082-AC; and, BACT Determination dated 02/01/2013.]
- P.4. Fuel Flow Meters.** The permittee shall operate and maintain equipment to continuously monitor and record the flow rates of both natural gas and low sulfur No. 2 fuel oil (e.g. flow meters with integrators) for the steam generating unit and replacement(s). [Rule 62-4.070(1)&(3), F.A.C.; and, Permit No. 0470002-082-AC.]
- P.5. Fuel Usage Limitations.** For purposes of PSD avoidance, the steam generating unit or replacement is subject to the following fuel usage limitations:
- a. No more than 414,600,000 CF of natural gas shall be fired in the steam generating unit during any consecutive 12- month period, rolling total.
 - b. No more than 3,040,000 gallons of low sulfur, No. 2 fuel oil shall be fired in the steam generating unit during any consecutive 12-month period, rolling total.
- [Rules 62-210.200, PTE and 62-212.400, PSD, F.A.C.; and, Permit No. 0470002-082-AC.]
- P.6. Operation.** The rented steam generating unit or replacement is authorized to operate only as a temporary boiler as defined in 40 CFR 60 Subpart Db & Dc, and 40 CFR 63 Subpart DDDDD. The steam generating unit or a replacement shall remain onsite and used for no more than 180 consecutive days in a given year. [Rules 62-4.070(1)&(3) and 62-210.200, PTE, F.A.C.; and, Permit No. 0470002-082-AC.]

Emission Limitations and Standards

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Emergency Rental Boiler

Unless otherwise specified, the averaging time for Specific Condition **P.7.** is based on the specified averaging time of the applicable test method.

- P.7. Visible Emissions.** Visible emissions shall not exceed 20% except for one six-minute period per hour during which opacity shall not exceed 27%. [Rule 62-296.406(1), F.A.C.]

{Permitting Note: Combustion of natural gas and compliance with the specified work practice standards provide the Department with reasonable assurance that the visible emissions standard is being met without the requirement for a compliance test.}

- P.8. Particulate Matter (PM) Emissions.** PM emissions shall be controlled by the firing of natural gas. The maximum sulfur content of low sulfur No. 2 fuel oil is limited to 0.05 %, by weight. [Rule 62-296.406(2), F.A.C.; and, BACT Determination dated 02/01/2013.]

- P.9. Sulfur Dioxide (SO₂) Emissions.** SO₂ emissions shall be controlled by the firing of natural gas. The maximum sulfur content of low sulfur No. 2 fuel oil is limited to 0.05 %, by weight. [Rule 62-296.406(3), F.A.C.; and, BACT Determination dated 02/01/2013.]

Excess Emissions

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

- P.10. Excess Emissions Allowed.** Excess emissions resulting from startup, shutdown or malfunction of any emissions unit 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.]

- P.11. 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.]

- P.12. Excess Emissions Notification.** In case of excess emissions resulting from a malfunction, the permittee shall immediately notify the Air Compliance Section of the Northeast District Office of the Department of Environmental Protection in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]

Test Methods and Procedures

- P.13. Annual VE Testing.** The permittee shall conduct a VE test that demonstrates compliance with the VE limit once every calendar year (January 1 - December 31). By permit, this annual VE test shall not be required should the unit fire natural gas; or, low sulfur No. 2 fuel oil for a total of less than 400 hours during the year. [Rules 62-4.070(21)&(3), 62-297.310(5)(b), 62-297.320, 62-297.310(8)(a)5.e. and Rule 62-297.310(8)(b)1., F.A.C.]

- P.14. Compliance Demonstration - Sulfur Dioxide/Fuel Sulfur Content.** The permittee shall demonstrate compliance with the sulfur content limitations for No.2 low sulfur fuel oil based on fuel supplier certification. The fuel certification provided by the supplier shall include the sulfur content or maximum sulfur content of the delivered No. 2 fuel oil. The sulfur content shall have been determined by a certified ASTM method adopted and incorporated by reference in Rule 62- 297.440(1), F.A.C. or another EPA approved method. [Rules 62-4.070(1)&(3) and Rule 62-297.440, F.A.C.; and, Permit No. 0470002-082-AC.]

- P.15. Compliance Demonstration - Fuel Sulfur Content Alternative.** As an alternative to demonstrating compliance with the sulfur content limitations for No. 2 low sulfur fuel oil by fuel supplier certification, the owner or operator shall demonstrate compliance by shipment fuel sampling. The initial performance test shall consist of sampling and analyzing the oil in the initial tank of oil to be fired in the steam generating unit to demonstrate that the oil contains 0.05 weight percent sulfur or less. The sample shall be analyzed

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before any oil is combusted. Thereafter, the owner or operator of the affected facility shall sample the oil in the fuel tank immediately after each new shipment of oil is received. If a partially empty fuel tank is refilled, a new sample and analysis of the fuel in the tank would be required upon filling. The sample shall be analyzed before any oil is combusted. The sulfur content shall have been determined by a certified ASTM method adopted and incorporated by reference in Rule 62- 297.440(1), F.A.C. or another EPA approved method. [Rules 62-4.070(1)&(3) and 62-297.440, F.A.C.; and, Permit No. 0470002-082-AC.]

P.16. 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 Appendix A of 40 CFR 60 and is 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 62-204.800, F.A.C.; and, Appendix A of 40 CFR 60.]

[Permitting Note: During opacity testing, Rule 62-297.310(3)(b), F.A.C does not apply. Rule 62-297.310(5)(b), F.A.C. shall apply during opacity test observation period. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. See Appendix TR, Conditions TR.2 and TR.4.]

P.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.]

{Permitting Note: Air compliance test notifications can now be completed online in the Department's Business Portal. To access this online process, go to <http://www.fldepportal.com/go/home> and sign in (or register if you're a new user) from the link in the upper right corner of the page. On the Welcome page select the Submit option, then select Registration/Notification, and then click on Air Compliance Test Notifications. Once in the process, just carefully read the instructions on each screen (and under the Help tabs) to complete the notification.}

Recordkeeping and Reporting Requirements

P.18. Notification. The Permittee shall provide a written notification to the Department of the following:

- a. **Onsite Date.** The date each steam generating unit and/or replacement unit is brought onsite. The notification shall be submitted no later than 15 days after such date, and shall include:
 1. The design heat input capacity and identification of the fuels to be combusted;
 2. The Manufacturer, Model, and Serial Number of the unit.
 - b. **Initial Startup Date.** The actual date of initial startup of the emissions unit. The notification shall be submitted within 15 days after such date.
 - c. **Removal Date.** The actual date each steam generating unit and/or replacement unit is removed from the site/facility location. The notification shall be submitted no later than 15 days after such date, and shall include:
 1. Total number of days each steam generating unit and/or replacement unit was located onsite.
 2. Total hours of operation of each steam generating unit and/or replacement unit.
- [Rule 62-4.070(1)&(3), F.A.C.; and, Permit No. 0470002-082-AC.]

P.19. Records. The owner or operator shall record and maintain the following records on site for at least five years from the date of such record:

- a. As determined from the fuel flow meters required by Specific Condition No. **P.4.**, the quantity of fuel combusted during each day of operation of the steam generating unit, by type (in gallons and cubic feet, as appropriate).

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- b. As determined from the fuel flow meters required by Specific Condition No. **P.4...**, the quantity of fuel combusted for each month and consecutive 12-month period, by type (in gallons and cubic feet, as appropriate).
- c. Purchase receipts of low sulfur No.2 fuel oil and natural gas purchased for use by the steam generating unit.
- d. Fuel supplier certification for each shipment of low sulfur No.2 fuel oil. The fuel supplier certification shall at least include information such as the name of the oil supplier, the sulfur content of the fuel oil, and the approved ASTM or EPA method used to determine the sulfur content.
- e. For any fuel sampling and analysis conducted, the results of the fuel analysis.
- f. Records of Visible Emission performance testing results
- g. Date each steam generating unit and/or replacement unit is brought onsite
- h. Date of initial startup of each steam generating unit and/or replacement unit
- i. Date each steam generating unit and/or replacement unit is removed from the facility location.
- j. Total number of consecutive days each rental steam generating unit and/or replacement unit is onsite.
- k. The combined total number of consecutive days all rental steam generating units (including replacements) are onsite.
- l. Manufacturer, Model, and Serial Number of each steam generating unit and/or replacement unit.
- m. Estimate of the quantity of the following pollutants generated for each steam generating unit and/or replacement unit while located at the site:
 - i. Carbon Monoxide
 - ii. Oxides of Nitrogen
 - iii. Sulfur dioxide
 - iv. Volatile Organic Compounds
 - v. Particulate Matter (PM), PM₁₀, and PM_{2.5}

Provide calculations for each pollutant estimate including supporting documentation for any emission factors used.

[Rule 62-4.070(1)&(3), F.A.C., and, Rule 62-212.400, PSD, F.A.C.]

P.20. Records - 40 CFR 60, Subpart Dc. The permittee shall record and maintain records of the amount of fuel combusted in this emissions unit during each calendar month. The records shall be maintained for a period of two years following the date of each record. [40 CFR 60.48c(g)(2) & (i).]

P.21. Reporting. The permittee shall submit to the Permitting Authority the records maintained in Specific Condition No. **P.19**. The records shall be submitted within 15 days of removing each steam generating unit and/or replacement unit. The records shall also be included in the Annual Operating Report that shall be submitted on or before April 1st of the year following the calendar year in which the data was recorded. [Rule 62-212.300, F.A.C.; and, Permit No. 0470002-082-AC.]

P.22. Reporting. If the facility changes operation or exceeds the operational restrictions in this subsection, the facility must immediately report (within 15 days) the changes to the Northeast District's Compliance Assurance Section. [Rule 62-4.070(1)&(3), F.A.C.]

P.23. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

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SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection Q. Emissions Unit 079 Natural Gas 230 MMBtu/ hour Auxiliary Boiler

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

EU No.	Brief Description
079	Natural Gas 230 MMBtu/hour Auxiliary Boiler

Detailed Description:

This Auxiliary Boiler has a design capacity of 160,000 pounds per hour of steam. This emissions unit is fired with natural gas, and low sulfur No. 2 fuel oil during natural gas curtailment only. The produced steam is used to augment steam produced from the sulfuric acid plants to provide operating flexibility in the phosphoric acid production and evaporation process.

Air Pollution Control Systems and Measures:

This EU has no control equipment.

Stack Parameters:

Emissions from this boiler are exhausted through a vertical stack which is 40 feet tall and it has an exit diameter of 1 foot.

{Permitting Note(s): This emission unit is regulated under: Rule 62-296.406, F.A.C., Fossil Steam Generators with Less Than 250 Million Btu Per Hour Heat Input, New and Existing Emission Units; 40 CFR 60, Subpart Db, Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units; and, 40 CFR 63, Subpart DDDDD, National Emissions Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, adopted and incorporated by reference in Rule 62-204.800(11)(b), F.A.C.}

Essential Potential to Emit (PTE) Parameters

- Q.1. Permitted Capacity.** The design heat input rate shall not exceed 230 MMBtu/hour. [Rule 62-210.200, Definitions - PTE, F.A.C.; and, Permit No. 0470002-097-AC.]
- Q.2. Emissions Unit Testing.** See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]
- Q.3. Methods of Operation - Fuel.** This emissions unit shall be fired with natural gas, and low sulfur No. 2 fuel oil during natural gas curtailment only. [Rule 62-210.200, PTE & 62-296.406(2) & (3), F.A.C ; and, Permit No. 0470002-097-AC.]
- Q.4. Hours of Operation.** The hours of operation are not limited (8760 hours per year) when firing natural gas. When firing No. 2 fuel oil, the hours of operation for this emissions unit shall not exceed 400 hours/year. [Rule 62-210.200, PTE, F.A.C.; and, Permit No. 0470002-097-AC.]

Emission Limitations and Standards

Unless otherwise specified, the averaging time for Specific Conditions **Q.5. - Q.8.** are based on the specified averaging time of the applicable test method.

- Q.5. Visible Emissions.** Visible emissions shall not exceed 20% except for one six-minute period per hour during which opacity shall not exceed 27% . [Rule 62-296.406(1), F.A.C.; 40 CFR 60.43b(f); and, Permit No. 0470002-097-AC.]

{Permitting Note: Combustion of natural gas and compliance with the specified work practice standards provide the Department with reasonable assurance that the visible emissions standard is being met without the requirement for a compliance test.}

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection Q. Emissions Unit 079 Natural Gas 230 MMBtu/ hour Auxiliary Boiler

- Q.6. Particulate Matter (PM) Emissions.** PM emissions shall be controlled by the firing of natural gas. No. 2 fuel oil sulfur content shall not exceed 0.05% sulfur by weight. [Rule 62-296.406(2), F.A.C.; Permit No. 0470002-097-AC; and, BACT Determination dated 08/07/2015.]
- Q.7. Sulfur Dioxide (SO₂) Emissions.** SO₂ emissions shall be controlled by the firing of natural gas. No. 2 fuel oil sulfur content shall not exceed 0.05% sulfur by weight. [Rule 62-296.406(3), F.A.C.; Permit No. 0470002-097-AC; and, BACT Determination dated 08/07/2015.]
- Q.8. NO_x Emissions.** NO_x emissions (expressed as NO₂) shall not exceed the following emission limits:

Fuel/steam generating unit type	Nitrogen oxide emission limits (expressed as NO ₂) heat input	
	ng/J	lb/MMBTu
(1) Natural gas and distillate oil		
(i) Low heat release rate	43	0.10
(ii) High heat release rate	86	0.20

[40 CFR 60.44b(a) (NSPS Db); and, Permit No. 0470002-097-AC.]

- Q.9. Nitrogen Oxides (NSPS).** The NO_x standards under the NSPS apply at all times including periods of startup, shutdown, or malfunction. Compliance with the emission limits under the NSPS is determined on a 30-day rolling average basis. [40 CFR 60.44b(h)&(i) (NSPS Db); and, Permit No. 0470002-097-AC.]

Excess Emissions

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

- Q.10. Excess Emissions Allowed.** Excess emissions resulting from startup, shutdown or malfunction of any emissions unit 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.]
- Q.11. 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.]
- Q.12. Excess Emissions Notification.** In case of excess emissions resulting from a malfunction, the permittee shall immediately notify the Compliance Assurance Program (CAP) of the Northeast District Office of the Department of Environmental Protection in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]

Monitoring of Operations

- Q.13. Boilers with > 10 MMBtu/hr heat input capacity.** The permittee must conduct a tune-up of the boiler annually as specified in 40 CFR 63.7540. [40 CFR 63.7540(a)(10) (40 CFR 63, Subpart DDDDD).]
{*Permitting Note: The tune-up will be conducted as a work practice for all regulated emissions under 40 CFR 63, Subpart DDDDD.*}

Test Methods and Procedures

- Q.14. Annual Compliance Tests - VE.** During every calendar year (January 1 - December 31) this EU shall be tested to demonstrate compliance with the opacity (VE) emission standards. By permit, this annual VE test shall not be required should the unit fire natural gas; or, low sulfur No. 2 fuel oil for a total of less than 400

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection Q. Emissions Unit 079 Natural Gas 230 MMBtu/ hour Auxiliary Boiler

hours during the year. Testing procedures shall be consistent with the requirements of Chapter 62-297, F.A.C. and Appendix A-4 of 40 CFR 60 which are adopted by reference in Rule 62-204.800, F.A.C. The test duration shall be 60 minutes. No other methods may be used unless prior written approval is received from the Department. [Rules 62-204.800, 62-297.100, 62-297.310(8)(a)1, F.A.C., 62-297.320 and 62-297.310(8)(a)5.e.; Appendix A of 40 CFR 60; 40 CFR 60.46b(d)(1),(3),(4)&(7); and, Permit No. 0470002-097-AC.]

{Permitting Note: Combustion of natural gas and compliance with the specified work practice standards provide the Department with reasonable assurance that the visible emissions standard is being met without the requirement for a compliance test.}

- Q.15. Opacity.** The permittee is not required to operate a COMS provided that the unit burns only gaseous fuels and/or liquid fuels (excluding residue oil) with a potential SO₂ emissions rate no greater than 26 ng/J (0.060 lb/MMBtu). [40 CFR 60.48b(j)(2) and 40 CFR 60.48b(l); and, Permit No. 0470002-097-AC.]
- Q.16. SO₂ Standard Compliance.** The owner or operator of an affected facility that only combusts very low sulfur oil, natural gas, or a mixture of these fuels with any other fuels not subject to an SO₂ standard is not subject to the compliance and performance testing requirements of 40 CFR 60, Subpart Db if the permittee obtains fuel receipts as described in (40 CFR 60.49b(r)). [40 CFR 60.45b(j); and, Permit No. 0470002-097-AC.]
- Q.17. NO_x Emission Standard Testing.** Compliance with the NO_x emission standards under the NSPS Db (40 CFR 60.44b) shall be determined through performance testing. To determine compliance with the emission limits for NO_x required under the NSPS Db (40 CFR 60.44b), the facility shall conduct the performance test using the continuous system for monitoring NO_x under (40 CFR 60.48(b)). [Permit No. 0470002-097-AC; 40 CFR 60.46b(c), and (e); and as adopted by Rule 62-204.800(8)(b)3.]
- Q.18. NO_x Emission Standard Testing.** Upon request, the facility shall determine compliance with the NO_x standards in NSPS Db (40 CFR 60.44b), through the use of a 30-day performance test. During periods when performance tests are not requested, NO_x emissions data collected pursuant to 40 CFR 60.48b(g)(2), are used to calculate a 30-day rolling average emission rate on a daily basis and used to prepare excess emission reports, but will not be used to determine compliance with the NO_x emission standards. A new 30-day rolling average emission rate is calculated each steam generating unit operating day as the average of all of the hourly NO_x emission data for the preceding 30 steam generating unit operating days. [40 CFR 60.46b(e)(4); and, Permit No. 0470002-097-AC.]
- Q.19. NO_x Emission Rates.** The permittee shall monitor steam generating unit operating conditions and predict NO_x emission rates as specified in a plan submitted pursuant to (40 CFR 60.49b(c)). [40 CFR 60.48b(g)(2); and, Permit No. 0470002-097-AC.]
- Q.20. 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 Appendix A of 40 CFR 60 and is 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 62-204.800, F.A.C.; and, Appendix A of 40 CFR 60]

{Permitting Note: During opacity testing, Rule 62-297.310(3)(b), F.A.C does not apply. Rule 62-297.310(5)(b), F.A.C. shall apply during opacity test observation period. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. See Appendix TR, Conditions TR.2 and TR.4.}

- Q.21. 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.]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection Q. Emissions Unit 079 Natural Gas 230 MMBtu/ hour Auxiliary Boiler

{Permitting Note: Air compliance test notifications can now be completed online in the Department's Business Portal. To access this online process, go to <http://www.fldepportal.com/go/home> and sign in (or register if you're a new user) from the link in the upper right corner of the page. On the Welcome page select the Submit option, then select Registration/Notification, and then click on Air Compliance Test Notifications. Once in the process, just carefully read the instructions on each screen (and under the Help tabs) to complete the notification.}

Recordkeeping and Reporting Requirements

- Q.22. Fuel Records.** The permittee shall record and maintain records of the amount of each fuel combusted during each day and calculate the annual capacity factor individually for natural gas, for the reporting period. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month. [40 CR 60.49b(d)(1).]
- Q.23. Opacity Records.** The permittee shall maintain records of opacity. In addition, the permittee shall maintain records according to the requirements specified in paragraphs (1) through (3) of 40 CFR 60, as applicable to the visible emissions monitoring method used.
- (1) For each performance test conducted using Method 9 of appendix A-4 of 40 CFR 60.49, the Permittee shall keep the records including the information specified in (1)(i) through (iii) of this Specific Condition.
 - (i) Dates and time intervals of all opacity observation periods;
 - (ii) Name, affiliation, and copy of current visible emission reading certification for each visible emission observer participating in the performance test; and
 - (iii) Copies of all visible emission observer opacity field data sheets.[40 CFR 60.49b(f)(1).]
- Q.24. Fuel oil Sulfur Content.** The owner or operator of an affected facility combusting very low sulfur oil shall demonstrate that the oil meets the definition of very low sulfur oil by maintaining fuel records as described in 40 CFR 60.49b(r). [40 CFR 60.42b(j); and, Permit No. 0470002-097-AC.]
- Q.25. NOx Records.** The permittee shall maintain records of the following information for each steam generating unit operating day:
- (1) Calendar date;
 - (2) The average hourly NOx emission rates (expressed as NO₂) (ng/J or lb/MMBtu heat input) measured or predicted;
 - (3) The 30-day average NOx emission rates (ng/J or lb/MMBtu heat input) calculated at the end of each steam generating unit operating day from the measured or predicted hourly nitrogen oxide emission rates for the preceding 30 steam generating unit operating days;
 - (4) Identification of the steam generating unit operating days when the calculated 30-day average NOx emission rates are in excess of the NOx emissions standards under (40 CFR 60.44b), with the reasons for such excess emissions as well as a description of corrective actions taken;
 - (5) Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken;
 - (6) Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data;
 - (7) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted.
- [40 CFR 60.49b(g)(1)-(7).]
- Q.26. Records - 40 CFR 63, Subpart DDDDD.** The permittee shall keep the following records:
- a. Records and results of all tune-ups conducted on the emissions units;
 - b. Compliance reports submitted to the Department; and

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection Q. Emissions Unit 079 Natural Gas 230 MMBtu/ hour Auxiliary Boiler

c. Notifications required under NESHAP 40 CFR 63, Subpart DDDDD.
[40 CFR 63.7555.]

Q.27. Excess Emissions Reporting - Opacity. The permittee shall submit excess emission reports for any excess emissions that occurred during the reporting period. For the purpose of (40 CFR 60.43b), excess emissions are defined as all 6-minute periods during which the average opacity exceeds the opacity standards under (40 CFR 60.43b(f)). [40 CFR 60.49b(h)(1)-(3).]

Q.28. Quarterly Reports for NO_x. The permittee may submit electronic quarterly reports for NO_x and/or opacity in lieu of submitting the written reports. The format of each quarterly electronic report shall be coordinated with the Compliance Authority. The electronic report(s) shall be submitted no later than 30 days after the end of the calendar quarter and shall be accompanied by a certification statement from the Permittee, indicating whether compliance with the applicable emission standards and minimum data requirements of this section was achieved during the reporting period. Before submitting reports in the electronic format, the owner or operator shall coordinate with the permitting authority to obtain their agreement to submit reports in this alternative format. [40 CFR 60.49b(v).]

Q.29. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

NSPS 40 CFR 60 Requirements

Q.30. NSPS 40 CFR 60 Requirements - Subpart Db. Except as otherwise provided in this permit, this emissions unit shall comply with all applicable provisions of 40 CFR 60, Subpart Db, Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units, adopted by reference in Rule 62-204.800(8)(b)2., F.A.C. This emissions unit shall comply with Appendix 40 CFR 60 Subpart Db attached to this permit. [Rule 62-204.800(8)(b)2., F.A.C.]

Q.31. NSPS 40 CFR 60 Requirements - Subpart A. This emissions unit shall comply with all applicable requirements of 40 CFR 60, Subpart A, General Provisions including:

- 40 CFR 60.7, Notification and Recordkeeping
- 40 CFR 60.8, Performance Tests
- 40 CFR 60.11, Compliance with Standards and Maintenance Requirements
- 40 CFR 60.12, Circumvention
- 40 CFR 60.13, Monitoring Requirements
- 40 CFR 60.19, General Notification and Reporting requirements

Adopted by reference in Rule 62-204.800(8)(d), F.A.C., except that the Secretary is not the Administrator for purposes of 40 CFR 60.4, 40 CFR 60.8(b)(2) and (3), 40 CFR 60.11(e)(7) and (8), 40 CFR 60.13(g), (i) and (j)(2), and 40 CFR 60.16. This emissions unit shall comply with Appendix 40 CFR 60 Subpart A attached to this permit. [Rule 62-204.800(8)(d), F.A.C.]

NESHAP 40 CFR 63 Requirements

Q.32. NESHAP 40 CFR 63 Requirements - Subpart A. This emissions unit shall comply with all applicable requirements of 40 CFR 63, Subpart A, General Provisions, which have been adopted by reference in Rule 62-204.800(11)(d)1., F.A.C., except that the Secretary is not the Administrator for purposes of 40 CFR 63.5(e), 40 CFR 63.5(f), 40 CFR 63.6(g), 40 CFR 63.6(h)(9), 40 CFR 63.6(j), 40 CFR 63.13, and 40 CFR 63.14. The applicable 40 CFR 63, Subpart A, General Provisions to which this emissions unit is subject to are found at 40 CFR 63.1 and are included in **Appendix 40 CFR 63 Subpart A**. [Rule 62-204.800(11)(d)1., F.A.C.]

Q.33. NESHAP 40 CFR 63 Requirements - Subpart DDDDD. This emissions unit shall comply with all applicable requirements of 40 CFR 63, Subpart DDDDD, NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, which have been adopted by reference in Rule 62-204.800(11)(b)86., F.A.C. The applicable 40 CFR 63, Subpart DDDDD, NESHAP for Major Sources:

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection Q. Emissions Unit 079 Natural Gas 230 MMBtu/ hour Auxiliary Boiler

Industrial, Commercial, and Institutional Boilers and Process Heaters to which this emissions unit is subject to are found at 40 CFR 63.7485 and are included in **Appendix 40 CFR 63, Subpart DDDDD**. [Rule 62-204.800(11)(b)86., F.A.C.]

NESHAP 40 CFR 63 Requirements

- Q.34.** NESHAP 40 CFR 63 Requirements - Subpart A. This emissions unit shall comply with all applicable requirements of 40 CFR 63, Subpart A, General Provisions, which have been adopted by reference in Rule 62-204.800(11)(d)1., F.A.C., except that the Secretary is not the Administrator for purposes of 40 CFR 63.5(e), 40 CFR 63.5(f), 40 CFR 63.6(g), 40 CFR 63.6(h)(9), 40 CFR 63.6(j), 40 CFR 63.13, and 40 CFR 63.14. The applicable 40 CFR 63, Subpart A, General Provisions to which this emissions unit is subject to are found at 40 CFR 63.1 and are included in **Appendix 40 CFR 63 Subpart A**. [Rule 62-204.800(11)(d)1., F.A.C.]
- Q.35.** NESHAP 40 CFR 63 Requirements - Subpart DDDDD. This emissions unit shall comply with all applicable requirements of 40 CFR 63, Subpart DDDDD, NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, which have been adopted by reference in Rule 62-204.800(11)(b)86., F.A.C. The applicable 40 CFR 63, Subpart DDDDD, NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters to which this emissions unit is subject to are found at 40 CFR 63.7485 and are included in **Appendix 40 CFR 63, Subpart DDDDD**. [Rule 62-204.800(11)(b)86., F.A.C.]

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SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection R. Emissions Unit 080

Two 4.25 MMBtu/hr Boilers

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

EU No.	Brief Description
080	Two 4.25 MMBtu/hr Boilers

Detailed Description:

This EU consists of two boilers: 1) a 100 HP York-Shipley, 4.25 MMBtu/hr heat input boiler; and, 2) a 100 HP FB-S 100 Fulton, 4.25 MMBtu/hr heat input boiler. The boilers fire natural gas. The boilers are designed to burn gas 1 fuels (a 40 CFR 63, Subpart DDDDD fuel type description). The boilers each have a 4.25 MMBTU/hr heat input.

Air Pollution Control Systems and Measures:

These boilers have no control equipment.

Stack Parameters:

Emissions from each boiler are exhausted through vertical stacks which are 10 feet tall and have an exit diameter of 0.5 feet.

{Permitting Note: This emission unit is regulated under: Rule 62-296.406, F.A.C., Fossil Fuel Steam Generators with less than 250 MMBtu/hour Heat Input, New and Existing Units; 40 CFR 63, Subpart DDDDD, NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, adopted and incorporated by reference in Rule 62-204.800, F.A.C.; and, 40 CFR 60, Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, adopted and incorporated by reference in Rule 62-204.800, F.A.C. 40 CFR 60, Subpart Dc imposes only a recordkeeping requirement.}

Essential Potential to Emit (PTE) Parameters

- R.1. Permitted Capacity.** The design heat input rate shall not exceed 4.25 MMBTU/hr for each boiler. [Rule 62-210.200, PTE, F.A.C.]
- R.2. Emissions Unit Testing.** See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]
- R.3. Methods of Operation - Fuel.** This emissions unit shall be fired only with natural gas. [Rules 62-210.200, PTE, & 62-296.406(2) & (3), F.A.C.]
- R.4. Hours of Operation.** This emissions unit may operate continuously (8,760 hours/year). [Rules 62-4.070(1)&(3) and 62-210.200, PTE, F.A.C.]

Emission Limitations and Standards

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

- R.5. Visible Emissions.** Visible emissions shall not exceed 20% except for one six-minute period per hour during which opacity shall not exceed 27%. [Rule 62-296.406(1), F.A.C.]
- R.6. Particulate Matter (PM) Emissions.** PM emissions shall be controlled by the firing of natural gas. [Rule 62-296.406(2), F.A.C.; Permit No. 0470002-104-AC; and, BACT Determination dated 07/01/2021.]
- R.7. Sulfur Dioxide (SO₂) Emissions.** SO₂ emissions shall be controlled by the firing of natural gas. [Rule 62-296.406(3), F.A.C.; Permit No. 0470002-104-AC; and, BACT Determination dated 07/01/2021.]

Excess Emissions

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

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection R. Emissions Unit 080

Two 4.25 MMBtu/hr Boilers

- R.8. Excess Emissions Allowed.** Excess emissions resulting from startup, shutdown or malfunction of any emissions unit 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.]
- R.9. 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.]
- R.10. Excess Emissions Notification.** In case of excess emissions resulting from a malfunction, the permittee shall immediately notify the Air Compliance Section of the Northeast District Office of the Department of Environmental Protection in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]

Work Standards

- R.11. Tune-Ups.** The permittee must conduct a tune-up of the boilers every 5 years as specified in to 40 CFR 63.7540(a)(12). [40 CFR 63.7515(d) (40 CFR 63, Subpart DDDDD).]

Test Methods and Procedures

- R.12. Annual VE Testing.** The permittee shall conduct a VE test that demonstrates compliance with the VE limit once every calendar year (January 1 - December 31). By permit, this annual VE test shall not be required should the unit fire natural gas. [Rules 62-4.070(1)&(3), 62-297.310(5)(b), 62-297.320, 62-297.310(8)(a)5.e. and Rule 62-297.310(8)(b)1., F.A.C.]

- R.13. 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 Appendix A of 40 CFR 60 and is 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, F.A.C.; and Appendix A of 40 CFR 60.]

(Permitting Note: During opacity testing, Rule 62-297.310(3)(b), F.A.C does not apply. Rule 62-297.310(5)(b), F.A.C. shall apply during opacity test observation period. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. See Appendix TR, Conditions TR.2 and TR.4.)

- R.14. 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.]

{Permitting Note: Air compliance test notifications can now be completed online in the Department's Business Portal. To access this online process, go to <http://www.fldepportal.com/go/home> and sign in (or register if you're a new user) from the link in the upper right corner of the page. On the Welcome page select the Submit option, then select Registration/Notification, and then click on Air Compliance Test Notifications. Once in the process, just carefully read the instructions on each screen (and under the Help tabs) to complete the notification.}

Recordkeeping and Reporting Requirements

- R.15. Records - 40 CFR 63, Subpart DDDDD.** The permittee shall keep the following records:

- Records and results of all tune-ups conducted on the emissions units;
- Compliance reports submitted to the Department; and
- Notifications required under NESHAP 40 CFR 63, Subpart DDDDD.

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection R. Emissions Unit 080 Two 4.25 MMBtu/hr Boilers

[40 CFR 63.7555.]

- R.16. Records - 40 CFR 60, Subpart Dc.** The permittee shall record and maintain records of the amount of fuel combusted in this emissions unit during each calendar month. The records shall be maintained for a period of two years following the date of each record. [40 CFR 60.48c(g)(2) & (i).]
- R.17. Other Reporting Requirements.** See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

NESHAP 40 CFR 63 Requirements

- R.18. NESHAP 40 CFR 63 Requirements - Subpart A.** This emissions unit shall comply with all applicable requirements of 40 CFR 63, Subpart A, General Provisions, which have been adopted by reference in Rule 62-204.800(11)(d)1., F.A.C., except that the Secretary is not the Administrator for purposes of 40 CFR 63.5(e), 40 CFR 63.5(f), 40 CFR 63.6(g), 40 CFR 63.6(h)(9), 40 CFR 63.6(j), 40 CFR 63.13, and 40 CFR 63.14. The applicable 40 CFR 63, Subpart A, General Provisions to which this emissions unit is subject to are found at 40 CFR 63.1 and are included in **Appendix 40 CFR 63 Subpart A**. [Rule 62-204.800(11)(d)1., F.A.C.]
- R.19. NESHAP 40 CFR 63 Requirements - Subpart DDDDD.** This emissions unit shall comply with all applicable requirements of 40 CFR 63, Subpart DDDDD, NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, which have been adopted by reference in Rule 62-204.800(11)(b)86., F.A.C. The applicable 40 CFR 63, Subpart DDDDD, NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters to which this emissions unit is subject to are found at 40 CFR 63.7485 and are included in **Appendix 40 CFR 63, Subpart DDDDD**. [Rule 62-204.800(11)(b)86., F.A.C.]

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SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection S. Emission Units 081 & 082

Gypsum Dewatering Stack, and Cooling Ponds

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

EU No.	Brief Description
081 & 082	Gypsum Dewatering Stack, and Cooling Ponds

Detailed Description:

There are three gypsum dewatering stacks at the White Springs Chemical Complex. The “Dorr-Oliver” and the “CTC” gypsum stacks are inactive and located at the closed SRCC. The “Swift Creek” gypsum stack system is active and located at the operating Swift Creek Chemical Complex. The active (only Swift Creek) gypsum dewatering stacks are used for process water management and accept gypsum

The CTC and Dorr-Oliver gypsum dewatering stack systems are located in Sections 34 and 35 of Township 1 North, Range 15 East, and Sections 1, 2 and 3 of Township 1 South, Range 15 East. Neither of these stacks has received phosphogypsum since cessation of phosphoric acid production at Suwannee River Chemical in July 2014. Closure activities have removed all the ponded process water from both stacks. The Swift Creek gypsum dewatering stack system has a permitted maximum footprint acreage of approximately 744 acres, encompassing approximately 327 acres for the active gypsum dewatering stack, 303 acres for the inactive portion of the gypsum dewatering stack, and 114 acres for the cooling pond system.

Hydrogen fluoride is emitted fugitively only from the stacks and the cooling pond and is reported in the annual operating report (AOR) submitted by the facility.

{Permitting Note: This emissions unit is regulated under: 40 CFR 61, Subpart R - National Emission Standards for Hazardous Air Pollutants (NESHAP) for Radon Emissions from Phosphogypsum Stacks; and, 40 CFR 63, Subpart AA - NESHAP From Phosphoric Acid Manufacturing Plants.}

Recordkeeping and Reporting Requirements

S.1. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

NESHAP 40 CFR 61 Requirements

S.2. NESHAP 40 CFR 61 Requirements - Subpart A. These emission units shall comply with all applicable requirements of 40 CFR 61, Subpart A, General Provisions (these have not been adopted by reference in Rule 62-204.800(10), F.A.C.). These emission units shall comply with **Appendix 40 CFR 61 Subpart A** attached to this permit. [Rule 62-204.800(10), F.A.C.]

S.3. NESHAP 40 CFR 61 Requirements - Subpart R. Except as otherwise provided in this permit, these emission units shall comply with all applicable provisions of 40 CFR 61, Subpart R, NESHAP Standards for Radon Emissions from Phosphogypsum Stacks (these have not been adopted by reference in Rule 62-204.800(10), F.A.C.). These emission units shall comply with **Appendix 40 CFR 61 Subpart R** included with this permit. [Rule 62-204.800(10), F.A.C.]

NESHAP 40 CFR 63 Requirements

S.4. NESHAP 40 CFR 63 Requirements - Subpart A. This emissions unit shall comply with all applicable requirements of 40 CFR 63, Subpart A, General Provisions, which have been adopted by reference in Rule 62-204.800(11)(d)1., F.A.C., except that the Secretary is not the Administrator for purposes of 40 CFR 63.5(e), 40 CFR 63.5(f), 40 CFR 63.6(g), 40 CFR 63.6(h)(9), 40 CFR 63.6(j), 40 CFR 63.13, and 40 CFR 63.14. The applicable 40 CFR 63, Subpart A, General Provisions to which this emissions unit is subject to are found at 40 CFR 63.1 and are included in **Appendix 40 CFR 63 Subpart A**. [Rule 62-204.800(11)(d)1., F.A.C.]

S.5. NESHAP 40 CFR 63 Requirements - Subpart AA. This emissions unit shall comply with all applicable requirements of 40 CFR 63, Subpart AA, National Emission Standards for Hazardous Air Pollutants

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection S. Emission Units 081 & 082

Gypsum Dewatering Stack, and Cooling Ponds

(NESHAP) from Phosphoric Acid Manufacturing Plants, which have been adopted by reference in Rule 62-204.800(11)(b)18., F.A.C. The applicable 40 CFR 63, Subpart BB, NESHAP from Phosphoric Acid Manufacturing Plants to which this emissions unit is subject to are found at 40 CFR 63.600 and are included in **Appendix 40 CFR 63, Subpart AA**. [Rule 62-204.800(11)(b)18., F.A.C.]

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SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection T. Emissions Unit 083

Rental 50 MMBtu/hour Boiler

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

EU No.	Brief Description
083	Rental 50 MMBtu/hour Boiler

Detailed Description:

This rental boiler, a 50 MMBtu/hour boiler, was manufactured by Cleaver Brooks and is a Model CBR-200-800-250-ST or equivalent. It is fired with natural gas as the primary fuel and low sulfur No. 2 fuel oil during natural gas curtailment only. The boiler is designed to burn gas 1 fuels (a 40 CFR 63, Subpart DDDDD fuel type description). The boiler provides steam for the Micronutrient process at the Independent Micronutrient Storage and Handling System.

Air Pollution Control Systems and Measures:

This EU has no control equipment.

Stack Parameters:

Emissions from this boiler are exhausted through a vertical stack which is 10 feet tall and it has an exit diameter of 1 foot.

{Permitting Note: This emission unit is regulated under: Rule 62-296.406, F.A.C., Fossil Fuel Steam Generators with less than 250 MMBtu/hour Heat Input, New and Existing Units; 40 CFR 63, Subpart DDDDD, NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, adopted and incorporated by reference in Rule 62-204.800, F.A.C.; and, 40 CFR 60, Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, adopted and incorporated by reference in Rule 62-204.800, F.A.C. 40 CFR 60, Subpart Dc imposes only a recordkeeping requirement.}

Essential Potential to Emit (PTE) Parameters

- T.1. Permitted Capacity.** The design heat input rate shall not exceed 50 MMBtu/hour. [Rule 62-210.200, PTE, F.A.C.; and, Permit No. 0470002-104-AC.]
- T.2. Emissions Unit Testing.** See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]
- T.3. Methods of Operation - Fuel.** This emissions unit shall be fired with natural gas as the primary fuel, and low sulfur No. 2 fuel oil during natural gas curtailment only. [Rules 62-210.200, PTE, & 62-296.406(2) & (3), F.A.C.; and, Permit No. 0470002-104-AC.]
- T.4. Hours of Operation.** This emissions unit may operate continuously (8,760 hours/year) when firing natural gas. When firing No. 2 fuel oil, the hours of operation for this emissions unit shall not exceed 400 hours/year. [Rules 62-4.070(1) & (3) and 62-210.200, PTE, F.A.C.; and, Permit No. 0470002-104-AC.]

Emission Limitations and Standards

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

- T.5. Visible Emissions.** Visible emissions shall not exceed 20% except for one six-minute period per hour during which opacity shall not exceed 27%. [Rule 62-296.406(1), F.A.C.]
- T.6. Particulate Matter (PM) Emissions.** PM emissions shall be controlled by the firing of natural gas. The maximum sulfur content of low sulfur No. 2 fuel oil is limited to 0.05 %, by weight. [Rule 62-296.406(2), F.A.C.; Permit No. 0470002-104-AC; and, BACT Determination dated 10/13/2016.]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection T. Emissions Unit 083

Rental 50 MMBtu/hour Boiler

T.7. Sulfur Dioxide (SO₂) Emissions. SO₂ emissions shall be controlled by the firing of natural gas. The maximum sulfur content of low sulfur No. 2 fuel oil is limited to 0.05 %, by weight. [Rule 62-296.406(3), F.A.C.; Permit No. 0470002-104-AC; and, BACT Determination dated 10/13/2016.]

Excess Emissions

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

- T.8. Excess Emissions Allowed.** Excess emissions resulting from startup, shutdown or malfunction of any emissions unit 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.]
- T.9. 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.]
- T.10. Excess Emissions Notification.** In case of excess emissions resulting from a malfunction, the permittee shall immediately notify the Air Compliance Section of the Northeast District Office of the Department of Environmental Protection in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]

Work Standards

- T.11. Tune-Ups.** The permittee shall conduct an annual tune-up of this emissions unit to demonstrate continuous compliance as specified in the following paragraphs. The tune-up must be conducted while burning natural gas.
- As applicable, inspect the burner, and clean or replace any components of the burner as necessary;
 - Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;
 - Inspect the system controlling the fuel-to-air ratio, as applicable, and ensure that it is correctly calibrated and functioning properly;
 - Optimize total emissions of carbon monoxide (CO). This optimization should be consistent with the manufacturer's specifications, if available;
 - Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable analyzer; and
 - Maintain onsite and submit, if requested by the Department, a report containing the following information:
 - The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the emissions unit; and
 - A description of any corrective actions taken as part of the tune-up.
- [Rule 62-296.406(2) & (3), F.A.C.; and, 40 CFR 63.7540(a)(10).]
- T.12. Operation and Maintenance.** The permittee shall operate and maintain this boiler in accordance with the manufacturer's best operational and maintenance procedures. This boiler shall be operated and maintained in a manner consistent with safety and good air pollution control practices for minimizing emissions. [Rules 62-4.070(1)&(3) and 62-296.406(2) & (3), F.A.C.; and 40 CFR 63.7500(a)(3).]

Test Methods and Procedures

- T.13. Annual VE Testing.** The permittee shall conduct a VE test that demonstrates compliance with the VE limit once every calendar year (January 1 - December 31). By permit, this annual VE test shall not be

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection T. Emissions Unit 083

Rental 50 MMBtu/hour Boiler

required should the unit fire natural gas; or, low sulfur No. 2 fuel oil for a total of less than 400 hours during the year. [Rules 62-4.070(21)&(3), 62-297.310(5)(b), 62-297.320, 62-297.310(8)(a)5.e. and Rule 62-297.310(8)(b)1., F.A.C.]

T.14. Compliance Demonstration - Sulfur Dioxide/Fuel Sulfur Content. The permittee shall demonstrate compliance with the sulfur content limitations for No.2 low sulfur fuel oil based on fuel supplier certification. The fuel certification provided by the supplier shall include the sulfur content or maximum sulfur content of the delivered No. 2 fuel oil. The sulfur content shall have been determined by a certified ASTM method adopted and incorporated by reference in Rule 62- 297.440(1), F.A.C. or another EPA approved method. [Rules 62-4.070(1)&(3) and Rule 62-297.440, F.A.C.; and, Permit No. 0470002-082-AC.]

T.15. 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 Appendix A of 40 CFR 60 and is 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, F.A.C.; and Appendix A of 40 CFR 60.]

{Permitting Note: During opacity testing, Rule 62-297.310(3)(b), F.A.C does not apply. Rule 62-297.310(5)(b), F.A.C. shall apply during opacity test observation period. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. See Appendix TR, Conditions TR.2 and TR.4.}

T.16. 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.]

{Permitting Note: Air compliance test notifications can now be completed online in the Department's Business Portal. To access this online process, go to <http://www.fldepportal.com/go/home> and sign in (or register if you're a new user) from the link in the upper right corner of the page. On the Welcome page select the Submit option, then select Registration/Notification, and then click on Air Compliance Test Notifications. Once in the process, just carefully read the instructions on each screen (and under the Help tabs) to complete the notification.}

Recordkeeping and Reporting Requirements

T.17. Annual Compliance Report. The permittee shall submit an annual compliance report with the following information. The report must be postmarked or submitted no later than January 31 after the annual period ending on December 31 of the previous year.

- Company and Facility name and address;
- Process unit information;
- Date of report and beginning and ending dates of the reporting period;
- The date of the most recent tune-up and the date of the most recent burner inspection if it was not done annually; and
- A statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

[40 CFR 63.7550(b)(1), (c)(1), (c)(5)(i) - (iii), (c)(5)(xiv), & (c)(5)(xvii).]

T.18. Records - 40 CFR 63, Subpart DDDDD. The permittee shall keep the following records:

- Records and results of all tune-ups conducted on the emissions units;
- Compliance reports submitted to the Department; and
- Notifications required under NESHAP 40 CFR 63, Subpart DDDDD.

[40 CFR 63.7555.]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection T. Emissions Unit 083

Rental 50 MMBtu/hour Boiler

- T.19. Records - 40 CFR 60, Subpart Dc.** The permittee shall record and maintain records of the amount of fuel combusted in this emissions unit during each calendar month. The records shall be maintained for a period of two years following the date of each record. [40 CFR 60.48c(g)(2) & (i).]
- T.20. Fuel Usage Records.** The permittee shall keep records of the amount of low sulfur No. 2 fuel oil and the dates of usage for the boiler. These records shall be made available upon request. [Permit No. 0470002-104-AC.]
- T.21. Other Reporting Requirements.** See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

NESHAP 40 CFR 63 Requirements

- T.22. NESHAP 40 CFR 63 Requirements - Subpart A.** This emissions unit shall comply with all applicable requirements of 40 CFR 63, Subpart A, General Provisions, which have been adopted by reference in Rule 62-204.800(11)(d)1., F.A.C., except that the Secretary is not the Administrator for purposes of 40 CFR 63.5(e), 40 CFR 63.5(f), 40 CFR 63.6(g), 40 CFR 63.6(h)(9), 40 CFR 63.6(j), 40 CFR 63.13, and 40 CFR 63.14. The applicable 40 CFR 63, Subpart A, General Provisions to which this emissions unit is subject to are found at 40 CFR 63.1 and are included in **Appendix 40 CFR 63 Subpart A**. [Rule 62-204.800(11)(d)1., F.A.C.]
- T.23. NESHAP 40 CFR 63 Requirements - Subpart DDDDD.** This emissions unit shall comply with all applicable requirements of 40 CFR 63, Subpart DDDDD, NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, which have been adopted by reference in Rule 62-204.800(11)(b)86., F.A.C. The applicable 40 CFR 63, Subpart DDDDD, NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters to which this emissions unit is subject to are found at 40 CFR 63.7485 and are included in **Appendix 40 CFR 63, Subpart DDDDD**. [Rule 62-204.800(11)(b)86., F.A.C.]

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