Mosaic Fertilizer, LLC
Bartow Facility

Facility ID No. 1050046
Polk County

Title V Air Operation Permit Revision

Permit No. 1050046-091-AV

(3rd Revision of Title V Air Operation Permit No. 1050046-077-AV)

Permitting Authority:

State of Florida
Department of Environmental Protection
Division of Air Resource Management
Permit Review Section
2600 Blair Stone Road
Mail Station #5505
Tallahassee, Florida 32399-2400
Telephone: 850/717-9000
E-mail: DARM_Permitting@dep.state.fl.us

Compliance Authority:

State of Florida
Department of Environmental Protection
Southwest District Office
Telephone: 813/470-5700
E-mail (preferred): SWD_Air@dep.state.fl.us & SWD_Air_Permitting@dep.state.fl.us

Title V Air Operation Permit Revision

Permit No. 1050046-091-AV

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

Permit No. 1050046-091-AV
Bartow Facility
Facility ID No. 1050046
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 Bartow Facility is located at 3200 Highway 60 West, Bartow in Polk County. UTM Coordinates are: Zone 17, 409.77 km East and 3087.26 North. Latitude is: 27°54'25.938" North; and, Longitude is: 81°55'0.9691" 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.

1050046-077-AV Effective Date: May 4, 2021
1050046-084-AV Effective Date: September 15, 2021
1050046-085-AV Effective Date: January 28, 2022
1050046-091-AV Effective Date: December 13, 2024
Renewal Application Due Date: September 21, 2025
Expiration Date: May 4, 2026

David Lyle Read, P.E.

Digitally signed by David Read
Date: 2024.12.13 15:00:35 -05'00'

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

DLR/sms

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Subsection A. Facility Description.

This existing facility consists of one phosphoric acid plant (two trains), one monoammonium phosphate/ diammonium phosphate (MAP/DAP) plant, one DAP fertilizer plant, three sulfuric acid plants, two fertilizer shipping plants, two auxiliary boilers, a limited-use boiler and a molten sulfur storage and handling system. Also at the facility are miscellaneous insignificant emissions units and/or activities.

Mosaic Fertilizer, LLC owns and operates the Bartow Facility.

Subsection B. Summary of Emissions Units.

EU No.	Brief Description
Regulated Emissions Units	
001	No. 3 Fertilizer Plant
002	No. 4 Fertilizer Shipping Plant
004	No. 3 Fertilizer Shipping Plant
010	Wet Phosphoric Acid Plant (No. 4 & No. 5 combined)
012	No. 4 Sulfuric Acid Plant
021	No. 4 Fertilizer Plant
032	No. 6 Sulfuric Acid Plant
033	No. 5 Sulfuric Acid Plant
045	Molten Sulfur System - Stack 45 (Pit A), 200 Ton Molten Sulfur Pit
046	Molten Sulfur Storage - Vent 44 from 6,000 Ton Tank
047	Molten Sulfur System - Vent from 3,000 Ton Surge Tank
050	Molten Sulfur System - Stack 47 (Pit B), 300 Ton Molten Sulfur Pit
052	Bartow Facility Phosphogypsum Stacks
079	Green Bay Facility Phosphogypsum Stacks
080	Firetube Scotch Marine Boiler
081	144.5 MMBtu/Hour Package Boiler at Green Bay
085	63 MMBtu/Hour RO Boiler at Green Bay
'Existing' Engines	
075	Existing Emergency CI RICE > 500 hp
076	Existing Emergency CI RICE < or equal to 500 hp
077	Existing Non-Emergency CI RICE 100 < hp < 500
078	Existing Non-Emergency Stationary CI RICE < 100 hp
'New' Engines	
074	New Stationary Emergency CI RICE
Unregulated Emissions Units and Activities (see Appendix U, List of Unregulated Emissions Units and/or Activities)	
053	Facility Wide Unregulated Emission Units and/or Activities

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

Subsection C. Applicable Requirements.

Based on the Title V air operation permit Revision application received April 27, 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).
Federal Rule Citations	
40 CFR 60, Subpart A, Standards of Performance for New Stationary Sources (NSPS) General Provisions	012, 032, 033, 085, 080, 074, 081
40 CFR 60, Subpart Db, Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units	081
40 CFR 60, Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units	080 & 085
40 CFR 60, Subpart H, Standards of Performance for Sulfuric Acid Plants	012, 032, 033
40 CFR 60, Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	074
40 CFR 61, Subpart A - NESHAP General Provisions	052, 079
40 CFR 61, Subpart R - National Emission Standards for Hazardous Air Pollutants (NESHAP) for Radon Emissions from Phosphogypsum Stacks	052, 079
40 CFR 63, Subpart A, NESHAP (a.k.a. MACT) General Provisions	001, 010, 021, 052, 079, 075, 076, 077, 078, 080, 081, 085
40 CFR 63, Subpart AA, NESHAP (a.k.a. MACT) From Phosphoric Acid Manufacturing Plants	010
40 CFR 63, Subpart BB, NESHAP (a.k.a. MACT) from Phosphate Fertilizers Production Plants	001, 021, 052, 079
40 CFR 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (RICE)	075, 076, 077, 078
40 CFR 63, Subpart DDDDD, NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters	080, 081, & 085
State Rule Citations	
Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD), Best Available Control Technology (BACT)	001, 010, 012, 032, 033, 021, 045, 046, 047 & 050
Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards	002, 004
Rule 296.402, F.A.C., Sulfuric Acid Plants	012, 032, 033
Rule 62-296.403, Phosphate Processing Fluorides Limits	001, 010, 021
Rule 62-296.406, F.A.C., Fossil Fuel Steam Generators with less than 250 MMBtu/hour Heat Input, New and Existing Units	080, 081, & 085
Rule 62-210.300, F.A.C., Permits Required	053, 074, 075, 076, 077, 078

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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. Confine blasting operations when practical.
b. All outside fertilizer conveyer belts are covered.[1]
c. Use street cleaning equipment to remove dirt from paved areas.[1]
d. Keep covers on process equipment.[1]
e. Prompt cleanup of dry rock spills.[1]
f. Use covered conveyor belts as and when practical.
g. Clean and remove dirt from paved areas.
h. Use dust suppression agents on fertilizer products.
i. Post appropriate speed limits on plant roadways.
j. Store fertilizer products inside buildings.
k. Enclose product material transfer points when practical.

[Rule 62-296.320(4)(c), F.A.C.; proposed by applicant in the Title V air operation permit renewal application received on November 19, 2020; and, [1] Permit No. AC53-253092.]

Reports and Fees

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

FW6. Electronic Annual Operating Report and Title V Annual Emissions Fees. The information required by the Annual Operating Report for Air Pollutant Emitting Facility [Including Title V Source Emissions Fee Calculation] (DEP Form No. 62-210.900(5)) shall be submitted by April 1 of each year, for the previous calendar year, to the Department of Environmental Protection's Division of Air Resource Management. Each Title V source shall submit the annual operating report using the DEP's Electronic Annual Operating Report (EAOR) software, unless the Title V source claims a technical or financial hardship by submitting DEP Form No. 62-210.900(5) to the DEP Division of Air Resource Management instead of using the reporting software. Emissions shall be computed in accordance with the provisions of subsection 62-210.370(2), F.A.C. Each

Title V source must pay between January 15 and April 1 of each year an annual emissions fee in an amount determined as set forth in subsection 62-213.205(1), F.A.C. The annual fee shall only apply to those regulated pollutants, except carbon monoxide and greenhouse gases, for which an allowable numeric emission-limiting standard is specified in the source's most recent construction permit or operation permit. Upon completing the required EAOR entries, the EAOR Title V Fee Invoice can be printed by the source showing which of the reported emissions are subject to the fee and the total Title V Annual Emissions Fee that is due. The submission of the annual Title V emissions fee payment is also due (postmarked) by April 1st of each year. A copy of the system-generated EAOR Title V Annual Emissions Fee Invoice and the indicated total fee shall be submitted to: **Major Air Pollution Source Annual Emissions Fee, P.O. Box 3070, Tallahassee, Florida 32315-3070.** Additional information is available by accessing the Title V Annual Emissions Fee On-line Information Center at the following Internet web site: 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.]

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.}

NOTES to PERMITTEE:

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

Subsection of this permit	EU	EU Description	Particulate Matter (PM) Limit	
			lbs./hr	tons per year
A.	001	No. 3 Fertilizer Plant Plant	11.0	48.2
B.	002	No. 4 Fertilizer Shipping Plant	10.54[1]	31.6[1]
C.	004	No. 3 Fertilizer Shipping Plant	N/A	N/A
F.	021	Diammonium Phosphate Fertilizer Plant	22.8[1]	96.9[1]
G.	045-050	Molten Sulfur Unloading, Storage and Handling System	0.99[2]	4.11[2]
I.	051	Package Watertube Boiler	4.38[3]	3.84[3]
J.	080	Firetube Scotch Marine Boiler	0.08[3]	0.04[3]
Total			49.79	

[1] Emission limit based on BACT determination.
[2] Emission estimate for emission inventory and PSD purposes.
[3] Emission estimate based on BACT determination.

FW10. Facility Maintenance and Improvements Project, Air Permit No. 1050046-086-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 NO_X and $PM_{2.5}$ from the emissions units specified in paragraph d of this specific condition; 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. 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's permitting and compliance authority 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. as provided by Appendix C of this permit. For this project, the permittee shall use the following methods in reporting the actual annual emissions:

(1) Emissions from each mode of operation for each pollutant shall be summed when calculating emissions to compare with the application's PSD analysis.

Pollutant	Emissions Units	Mode of Operation	Calculation Method
NO_X	SAP No. 4	Sulfuric acid production	Most recent performance test (every 5 years) and SAP production from the reporting year
	SAP No. 5		
	SAP No. 6		
	SAP No. 4	Natural gas combustion	Applicable EPA AP-42 emission factors (Chapter 1.4) and natural gas consumption for the reporting year
	SAP No. 5		
	SAP No. 6		
	No. 3 Fertilizer Plant		
	No. 4 Fertilizer Plant		
	41 MMBtu/hour Firetube boiler		
	144.5 MMBtu/hour package boiler		
	99.9 MMBtu/hour RO boiler		
$PM_{2.5}$	SAP No. 4	Natural gas combustion	Applicable EPA AP-42 emission factors (Chapter 1.4) and natural gas consumption for the reporting year
	SAP No. 5		
	SAP No. 6		
	No. 3 Fertilizer Plant		
	No. 4 Fertilizer Plant		
	41 MMBtu/hour Firetube boiler		
	144.5 MMBtu/hour package boiler		
	99.9 MMBtu/hour RO boiler		
	No. 3 Fertilizer Plant	Fertilizer production	Highest 5-year average of performance test results and unit production for the reporting year
	No. 4 Fertilizer Plant		
	No. 3 Fertilizer Shipping Plant	Normal operation	Highest emission factor used over the last 5 years
	No. 4 Fertilizer Shipping Plant		

Pollutant	Emissions Units	Mode of Operation	Calculation Method
			in annual operating report
	Molten Sulfur System		Highest average hourly emissions rate over the last 5 years in annual operating report

(2) As defined in Rule 62-210.370(2), F.A.C., the permittee shall use a more accurate methodology if it becomes available.

e. The analysis that resulted in these requirements is as follows:

Pollutant	Annual Emissions, Tons/Year			
	Baseline Actual	Projected Actual	Demand Growth (Excluded Emissions)	Increase
NO_X	156.20	206.07	14.31	35.57
$PM_{2.5}$	42.42	53.00	2.66	7.92

[Rules 62-212.300(1)(e) and 62-210.370, F.A.C.; and Application 1050046-086-AC]

{Permitting Note: The reporting requirements in the above condition begin in the first full calendar year after the completion of all work authorized by this permit.}

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Subsection A. Emissions Unit 001
No. 3 Fertilizer Plant

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

EU No.	Brief Description
001	No. 3 Fertilizer Plant

The No. 3 Fertilizer Plant has a design capacity of 3,456 tons per day (TPD) produces ammonium phosphate products: monoammonium phosphate (MAP) and diammonium phosphate (DAP), which may be enhanced with addition of commercially available zinc, copper, boron, manganese and/or sulfur micronutrients. The ammonia and phosphoric acid are combined in the reactor to give the ammoniated phosphate slurry which is then conveyed to the granulator where ammonia is further introduced via sparging at the bottom as the slurry is sprayed axially. In some instances, phosphoric acid is also introduced into the granulator. The granular MAP or DAP so formed then goes to the dryer to remove the moisture, is then screened to obtain the desired product size, then cooled in the rotary cooler and then sent to the product storage warehouses. The process consists of a reactor, granulator, dryer, cooler, mills, screens, conveyors and pollution control equipment comprising of primary and secondary scrubbers, along with other ancillary equipment such as the ammonia chiller, cyclones and seal tanks. The dryer is fired with natural gas, or fuel oil with a maximum sulfur content of 1.5%, at a design heat input rate of 40 MMBtu per hour. Process gas streams have the following dedicated control equipment:

- Reactor has venturi scrubbers and a cyclonic scrubber.
- Dryer is controlled by a venturi scrubber and a cyclonic scrubber.
- Granulator is controlled by a venturi scrubber and a cyclonic scrubber.
- Cooler has venturi scrubbers and a cyclonic scrubber.

The dryer process has a dedicated packed bed tail gas scrubber while the reactor, granulator, and cooler processes share a packed bed tail gas scrubber. The two tailgas packed bed scrubbers exhaust to a common stack.

The reactor emissions, along with those from elevators, screens, mills, hoppers, and such ancillary equipment areas go through the RV venturi cyclonic scrubber which uses product recovery solution as the scrubbing liquid. Emissions from the granulator go to the granulator venturi cyclonic scrubber which uses product recovery solution as the scrubbing liquid. Emissions from the dryer go to the dryer venturi cyclonic scrubber which uses product recovery solution as the scrubbing liquid. Emissions from the cooler go to the cooler venturi cyclonic scrubber which uses diammonium phosphate (DAP) pond water and effluent from the dryer tail gas packed bed scrubber. The two exhaust streams from the granulator venturi cyclonic scrubber and the RV venturi cyclonic scrubber go to the ammonia vaporizer which feeds into the RGV cyclonic separator that uses re-use water as the scrubbing liquid. Exhaust from the dryer venturi cyclonic scrubber goes to the dryer tailgas packed bed scrubber which uses re-use water as scrubbing liquid. Exhaust from the RGV cyclonic separator and liquor effluent from the dryer tail gas scrubber feed into a mist eliminator which feeds back into the dryer tail gas scrubber. A separate exhaust stream from the dryer tail gas scrubber, and an exhaust stream from the mist eliminator feed into a stack that vents into the atmosphere.

A coating oil ribbon blender has been installed in the No. 3 Fertilizer Plant downstream of polishing screens to apply de-dusting coating oil to the product. The current practice of application of de-dusting coating oil into the rotary cooler is retained to allow for contingencies such as maintenance and breakdowns.

The stack is 99 feet tall with an exit diameter of 7.5 feet. Exhaust gas exits the stack at a temperature of 135ºF and a volumetric flow rate of 200,000 actual cubic feet per minute (acfm), which can vary on a daily basis.

Two 4,800 cubic foot storage silos and two 400 cubic foot day bins to store zinc and boron micronutrient compounds located at the No. 3 Fertilizer Plant can be found in the Appendix I-1, List of Insignificant Emission Units and/or Activities.

{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.; Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD), Best Available Control Technology (BACT) for Particulate Matter and Particulate Matter less than 10 microns in diameter (PM/PM_{10}) and Fluoride (F); 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

A.1. Permitted Capacity. The maximum permitted production rate is as follows:

a. The maximum permitted production rate for the No. 3 Fertilizer Plant shall not exceed 3,456 tons per day of DAP or MAP product including products with commercially available zinc, copper, boron, manganese, and/or sulfur micronutrients. All micronutrients used shall be only those sold commercially as soil nutrients and shall be received, unloaded, handled, and processed such that all emissions of micronutrients are captured by existing air pollution control devices.

b. The maximum process rate shall not exceed 70.56 tons per hour of 100 percent phosphoric acid (P_2O_5) input (daily average basis).

c. The maximum heat input rate to the dryer is limited to 40 MMBtu per hour (daily average basis).

[Rule 62-4.160(2), F.A.C. and Rule 62-210.200, Definitions - Potential to Emit (PTE), F.A.C.; and, Permit Nos. PSD-FL-255 (1050046-008-AC & 1050046-012-AC), 1050046-067-AC, and 1050046-083-AC.]

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.]

{Permitting Note: The operating rate limitation applies to the process throughput for the unit and not to the heat input for the product dryer.}

A.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. 1050046-008-AC/PSD-FL-255.]

A.4. Methods of Operation - Fuels. The dryer shall be fired with natural gas or new No. 6 fuel oil or a better grade oil (see permitting note below). The fuel oil shall contain no more than 1.5% sulfur, by weight. The "*new*" fuel oil is defined as being refined from crude oil and has not been used, and may or may not contain additives. No. 6 fuel oil with a maximum content of 1.5% sulfur by weight may be fired up to a maximum of 338,000 gallons per year. Firing rate of either fuel shall not exceed 40 MMBtu per hour. The permittee shall maintain records of the fuel oil supplier's sulfur content analysis. [Rule 62-213.410, F.A.C.; and, Permit No. 1050046-008-AC/PSD-FL-255.]

{Permitting Note, Better Grade Fuel Oil: A better grade fuel oil is defined as a fuel with a higher ranking in the following list:

Better Grade (Top of List)
new, No. 2 fuel oil
new, No. 3 fuel oil
new, No. 4 fuel oil
new, No. 5 fuel oil
new, No. 6 fuel oil}

Emission Limitations and Standards

Unless otherwise specified, the averaging time(s) for Specific Conditions **A.5. - A.7.** are based on the specified averaging time of the applicable test method.

A.5. Visible Emissions. Visible emissions shall not exceed 15% opacity. The visible emissions test shall be conducted by a certified observer and be a minimum of thirty minutes in duration, unless otherwise specified. The test observation period shall include the period during which the highest opacity can reasonably be expected to occur. [Permit Nos. 1050046-008-AC/PSD-FL-255 & 1050046-029-AC/PSD-FL-255A.]

A.6. Fluoride (F) Emissions. Fluoride emissions from the No. 3 Fertilizer Plant shall not exceed 0.041 pound of fluoride per ton of equivalent P_2O_5 feed or 2.5 pounds of fluoride per hour or 10.95 TPY, whichever is less. [Rule 62-296.403(1), F.A.C.; and, Permit No. 1050046-008-AC/PSD-FL-255.]

*{Permitting Note: The fluoride emission limit in Condition **A.6** of 0.041 lb/ton of equivalent P_2O_5 feed is more stringent than the applicable NESHAP, 40 CFR 63.622(a) limit of 0.06 lb/ton of equivalent P_2O_5 feed. The permittee shall comply with other applicable requirements of the NESHAP, 40 CFR 63, Subparts A and BB. The limit of 2.5 lb F/hour is based on a P_2O_5 feed rate of 61.25 tons/hour.}*

A.7. PM Emissions. Particulate matter (PM) emissions shall not exceed 0.088 pounds per ton (PPT) of product nor 11.0 pounds per hour. [Rule 62-296.320(4), F.A.C.; and, Permit No. 1050046-029-AC/PSD-FL-255A.]

{Permitting Note: This replaces the emissions rate of 0.18 PPT of P_2O_5 feed into the reactor. The limit of 11.0 lb PM/hour is based on a production rate of 125 tons/hour, i.e., 3,000 tons/day.}

A.8. Fugitive Emissions. Fugitive particulate and fluoride emissions from the process, conveying and storage equipment shall be controlled by sealing and/or venting particulate matter and fumes from the equipment to the pollution control devices. [Rule 62-4.070(1)&(3), 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.

A.9. 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.10. 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.]

A.11. Excess Emissions Notification. In case of excess emissions resulting from a malfunction, the permittee shall immediately notify the Air Compliance Section of the Southwest 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

A.12. Feed Material Monitoring. 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 monitoring device shall have an accuracy of ± 5% over its operating range. [40 CFR 63.625(a)(1); and, Permit No. 1050046-008-AC/PSD-FL-255.]

A.13. Control Equipment Monitoring. 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 monitors 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 ±5% over its operating range.
   2) A "gas" monitoring system as outlined in Table 3 of Subpart BB 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.

[Rule 62-4.070(1)&(3), F.A.C.; 40 CFR 63.625(d); Permit No. 1050046-022-AC; and, ASP Request 15-U-AP.]

*{Permitting Note: Paragraph **a.** of Specific Condition **A.13.** incorporates language from NSPS Subpart V (40 CFR 60.223(c)). This unit is subject to NESHAP Subpart BB, which exempts it from NSPS Subpart V. However, use of this language was authorized by ASP Request 15-U-AP as an alternative to the scrubber monitoring provisions of NESHAP Subpart BB.}*

A.14. Monitoring Log. 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. The record log shall contain, at a minimum:
a. the water flow rate (gallons per minute);
b. the scrubber pressure drop (inches of water);
c. the date and time of the measurements, and,
d. the name of the person responsible for performing the measurements.

A record log entry for each scrubber shall be made at least once for every 8 hour shift when the No. 3 Fertilizer Plant operates. [Rules 62-4.070(3), 62-4.160(14)(b) & 62-4.160(14)(c), F.A.C.]

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

A.15. Alternate Monitoring Plan. The pollution control equipment may 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.]

Test Methods and Procedures

A.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
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.]

A.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.}

A.18. Annual Compliance Tests Required. During each calendar year (January 1st to December 31st), each EU shall be tested to demonstrate compliance with the emissions standards for VE, F and PM in Specific Conditions **A.5. - A.7**. [Rules 62-210.300(2)(a) and 62-297.310(8), F.A.C.]

A.19. Determination of Total Fluoride Emissions. The permittee shall determine compliance with the total fluorides standard as required in 40 CFR 63.626(f), based on the equivalent P_2O_5 computed as indicated in 40 CFR 63.626(f)(3). [40 CFR 63.626(f).]

A.20. Monitoring During Test. To comply with 40 CFR 63.625(a)(1) or (2), the owner or operator shall use the monitoring systems in 40 CFR 63.625(d) 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 40 CFR 63.625(a)(1) or (2). [40 CFR 63.626(d)(4).]

A.21. Additional Compliance Test Requirements. Compliance testing shall be conducted while firing oil in the product dryer, if oil of any type has been used in the product dryer for a sum total of more than 400 hours from the previous test. If a test is conducted while firing natural gas, and in the 12 month period following the test, fuel oil of any type is burned for a sum total of more 400 hours, then an additional emissions test per Specific Conditions **A.17.**, **A.18.**, **A.19.** and **A.20.** shall be conducted, while burning oil in that source, within 30 days of having exceeded the 400 hour oil burning limit. A compliance test is required for operating the product dryer on the lowest grade oil than was used since the last compliance test. If testing is conducted while firing fuel oil in the dryer, compliance with the sulfur content requirement of Specific Condition **A.4.** shall be demonstrated during the test by submitting either a Certificate of Fuel Oil Analysis from your fuel oil vendor for the fuel used during the compliance test; or a Certificate of Fuel Oil Analysis for a fuel oil sample taken during the compliance test. of the following with the test report. [Rules 62-297.310(7)(b) & 62-4.070(3), F.A.C.; and, Permit No. 1050046-052-AC.]

Recordkeeping and Reporting Requirements

A.22. P_2O_5 Daily Equivalent Recordkeeping. The permittee shall maintain a daily record of equivalent P_2O_5 feed. The equivalent P_2O_5 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).]

A.23. Sulfur Content of Fuel Record. In order to document continuing compliance with the maximum sulfur content requirement of Specific Condition **A.3.**, the permittee shall maintain a record of the sulfur content of the fuel oil received for use in the product dryer. These records may be based on vendor supplied information or analysis of samples taken by the permittee in accordance with Rule 62-297.440, F.A.C. [Rule 62-4.070(1)&(3), F.A.C.]

A.24. Daily Record Logs. A daily record log(s) shall be established and maintained to document, at a minimum, the following:

a. Facility Name, Facility ID No. (1050046), Emission Unit No. (E.U. 001) and Description;
b. Date;

c. Product Mode (DAP or MAP);
d. When operating, Daily, record the hours of operation of the DAP/MAP production;
e. When operating, Daily, record the quantity, in tons, of the DAP/MAP production;
f. When operating, Daily, record the production rate, in tons/hour (daily average), of the DAP/MAP production;
g. When operating, Daily, record material process rate, in tons/hour of 100% P_2O_5.
h. the quantity of natural gas and the quantity of oil and type of oil (No. 2, No. 3, No. 4, No. 5, or No. 6 fuel oil) utilized in the product dryer;
i. the sulfur content (percent, by weight) of each type of oil (No. 2, No. 3, No. 4, No. 5, or No. 6 fuel oil) utilized in the product dryer. The sulfur content may be based upon vendor supplied as-delivered oil sulfur content information, or an oil analysis;
j. the total hours of product dryer operation using oil of any type;
k. the total hours of product dryer operation using oil of any type for each consecutive rolling 12-month period (hours per 12 months);
l. gallons of No. 6 fuel oil used for each consecutive rolling 12-month; and,
m. heat input rate, mmBtu/hr (daily average)

[Rule 62-4.070(1)&(3), F.A.C.; and, Permit No. 1050046-023-AC.]

*{Permitting Note: See NESHAP Conditions (Specific Conditions **A.13.**, **A.19.**, **A.20.**, **A.27.**, **A.31.**, **A.32.** & **A.33.**) as well as 40 CFR 63, Subpart A for additional recordkeeping requirements.}*

A.25. Operational Records. The permittee shall maintain the following records in written or electronic operational logs: date, time and duration of production with and without micronutrients and quantity of the micronutrients input to the plant. These records are to be provided upon request within 3 working days. [Rule 62-4.070(1)&(3), F.A.C.; Permit No. 1050046-029-AC/PSD-FL-255A.]

A.26. Test Reports. All test reports submitted to the Compliance Assurance Program (CAP) of the Southwest District Office of the Department shall include, at a minimum, the following information for the test period:
a. Type of fuel being fired.
b. Heat input rate (MMBtu per hour) and firing rate (MCF per hour and/or gallons per hour).
c. Material process input rate (Tons per hour) and production rate (Tons per hour).
d. Scrubber liquid flow rate (gpm).
e. If the test was conducted while firing natural gas, then include a statement of the total hours of dryer operation while firing fuel oil, of any type, during the 12 consecutive month period prior to the test.

Failure to submit the above information, or operating at conditions which do not reflect normal operating conditions may invalidate the test and fail to provide reasonable assurance of compliance. [Rule 62-4.070(1)&(3), F.A.C.]

*{Permitting Note: See NESHAP Conditions (Specific Conditions **A.13.**, **A.19.**, **A.20.**, **A.27.**, **A.31.**, **A.32.** & **A.33.**) as well as 40 CFR 63, Subpart A, for additional monitoring and recordkeeping requirements during performance tests.}*

A.27. 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.]

A.28. Actual Emissions Reporting. Permit No. 1050046-052-AC 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. Emissions shall be computed in accordance with the provisions in Rule 62-210.370, F.A.C., which are provided in Appendix TV 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 TV 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.

For this project, the permit requires the annual reporting of actual PM and Fluoride (F) emissions this emissions unit. [Permit No. 1050046-052-AC.]

*{Permitting Note: This reporting requirement replaces the emissions reporting requirement in Permit No. 1050046-043-AC, Section 2., Specific Condition 9. Baseline emissions of PM and fluoride were determined to be 9.00 TPY and 2.15 TPY, respectively. For purposes of establishing the reporting period for Specific Condition **A.28**., this unit completed the construction authorized by Permit No. 1050046-052-AC and commenced operation on November 9, 2017. The reporting period begins with the 2018 calendar year and ends with the 2022 calendar year. To facilitate reporting these annual emissions, the permittee may use the optional Appendix ET found in the Referenced Attachments of the Appendices. For all overlapping reporting periods in Specific Conditions **A.28**. and **F.22**. (see Section III., Subsection F), the sum of Annual Emissions for each fertilizer plant should be subtracted from the sum of Baseline Actual Emissions for each fertilizer plant. If the difference between the sum of Annual Emissions and the sum of Baseline Actual Emissions, after accounting for demand growth for each fertilizer plant, exceeds the significant emissions rate for a PSD pollutant (25 TPY for PM and 3 TPY for F), a discussion of PSD applicability (i.e., the reason the projects authorized by Permit Nos. 1050046-046-AC and 1050046-052-AC were major or minor modifications) should be provided.}*

A.29. Actual Emissions Reporting. Permit Nos. 1050046-067-AC and 1050046-083-AC are 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 10 years following resumption of regular operations after the change. Emissions shall be computed in accordance with the provisions in Rule 62-210.370, F.A.C., which are provided in Appendix TV of this permit.

b. The permittee shall report to the Department's permitting and compliance authority within 60 days after the end of each calendar year during the 10-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 TV of this permit;
   (3) The annual consumption of P_2O_5 for the No. 3 Fertilizer (DAP/MAP) Plant (EU 001);

(4) If the emissions differ from the preconstruction projection, an explanation as to why there is a difference; and

(5) 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. as provided by Appendix TV of this permit. For this project, the permittee shall use the following methods in reporting the actual annual fluoride (F) emissions for the No. 3 Fertilizer (DAP/MAP) Plant (EU 001):

(1) Unless otherwise approved by the Department, the permittee shall use the applicable 5-year average of F stack test results from EU 001 and the applicable annual consumption of P_2O_5 to calculate the annual F emissions.

(2) As defined in Rule 62-210.370(2), F.A.C., the permittee shall use a more accurate methodology if it becomes available.

e. Baseline emissions of fluoride were determined to be 2.7 tons per year; the could have accommodated emissions of fluoride were determined to be 4.8 tons per year; and the projected actual emissions of fluoride were determined to be 3.1 tons per year. The projected actual emissions are based on a maximum projected yearly P_2O_5 consumption of 389,193 tons.

[Rules 62-212.300(1)(e) and 62-210.370, F.A.C.; and Permit No. 1050046-083-AC]

A.30. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

Other Requirements

A.31. Alternate Monitoring Methods.

a. The permittee is subject to NESHAP alternate monitoring methods within ASP Request 15-U-AP - Alternate Monitoring Plan to that Required by 40 CFR 63 Subparts AA and BB dated 05/15/2015 (Attachment B); [40 CFR 63.632(a), ASP Request 15-U-AP]; and,

b. The Permittee is subject to NESHAP alternate monitoring methods within ASP Request 19-P-AP - Alternate Monitoring Plan to that Required by 40 CFR 63 Subparts AA and BB dated 11/07/2019 (Attachment F). [40 CFR 63.632(a), ASP Request 19-P-AP.]

A.32. Determining Allowable Range of Scrubber Operation Parameters. Following the date on which the performance test required in § 63.626 is completed, the owner or operator of a new or existing affected source using a wet scrubbing emission control system and subject to emissions limitations for total fluorides or particulate matter contained in this subpart must establish allowable ranges for operating parameters using the methodology of either paragraph (f)(1) or (2) of this section:

a. 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 § 63.625(d)(1). 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.

b. The owner or operator of any new or existing affected source shall establish, and provide to the Administrator for approval, allowable ranges of baseline average values for the pressure drop across and of the flow rate of the scrubbing liquid to each scrubber in the process scrubbing system for the purpose of assuring compliance with this subpart. Allowable ranges may be based upon baseline average values recorded during previous performance tests using the test methods required in this subpart and established in the manner required in § 63.625(d)(1). As an alternative, the owner or operator can establish the allowable ranges of baseline average values using the results of performance tests conducted specifically for the purposes of this paragraph using the test methods required in this subpart and established in the manner required in § 63.625(d)(1). The source shall certify that the control devices and processes have not been modified subsequent to the testing upon which the data used to establish the allowable ranges were obtained. The allowable ranges of baseline average values developed pursuant to the provisions of this paragraph must be submitted to the Administrator for approval. The owner or operator must request and obtain approval of the Administrator for changes to the allowable ranges of baseline average values. When a source using the methodology of this paragraph is retested, the owner operator shall determine new allowable ranges of baseline average values unless the retest indicates no change in the operating parameters from previous tests. Any new allowable ranges of baseline average values resulting from the most recent performance test shall be effective on the date following the retest. Until changes to allowable ranges of baseline average values are approved by the Administrator, the allowable ranges for use in § 63.624 shall be based upon the range of baseline average values proposed for approval.

[40 CFR 63.625(d).]

A.33. Maintaining Allowable Range of Scrubber Operation Parameters. On or after the date on which the initial performance (compliance) test is completed, 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), as indicated in Specific Condition **A.31.** [40 CFR 63.625.]

A.34. 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-U-AP - Alternate Monitoring Plan to that Required by 40 CFR 63 Subparts AA and BB dated 05/15/2015). The owner or operator is responsible for remaining in compliance with any updates made to Subpart A or BB. To establish operating parameters for this emissions unit, the owner or operator must comply /and demonstrate with the following:

a. Must comply with all conditions of ASP Request 15-U-AP,
b. Must comply with all applicable requirements of Subparts A and BB,
c. Specifically notify the department the testing will be for establishing allowable ranges for this emissions unit according to 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 Subparts A and BB,
g. Failure to meet any requirements of this condition, Subpart A or BB, or the alternate plan will negate use of any new ranges derived from the test.

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

NESHAP 40 CFR 63 Requirements

A.35. 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.]

A.36. 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 B. Emissions Unit 002
No. 4 Fertilizer Shipping Plant

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

EU No.	Brief Description
002	No. 4 Fertilizer Shipping Plant

The No. 4 Fertilizer Shipping Plant includes material conveyors, transfer points, and one (1) truck and two (2) rail car shipping bins and loadout spouts. All material transfer points are located inside the material handling building and are covered to minimize fugitive emissions. The truck and rail car loading operations are beneath the building and enclosed on two sides. Loading is done via a chute feeder which is also controlled by dust suppressant.

An evacuation scrubber dust control system is used to control moisture in the building. As an alternative to full-time utilization of the evacuation scrubber dust control system, the use of dust suppressant to control the generation of dust is allowed. Any deviation from 100% dust suppressant to control particulate matter (PM) emissions will result in compliance action and submittal of a Compliance Assurance Monitoring (CAM) Plan by the permittee for the scrubber.

{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

B.1. Permitted Capacity. The maximum truck and/or railcar product loading rate shall not exceed 660 tons per hour. [Rules 62-4.160(2) and 62-210.200, Definitions - Potential to Emit (PTE), F.A.C.; and Permit No. AC53-239194.]

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. The hours of operation of this emissions unit shall not exceed 6,000 hours in any 12 month consecutive period. [Rule 62-210.200, PTE, F.A.C.; and, Permit No. AC53-239194.]

Emission Limitations and Standards

Unless otherwise specified, the averaging time(s) for Specific Conditions **B.4.** - **B.7.** are based on the specified averaging time of the applicable test method.

B.4. Visible Emissions. Visible emissions (VE) shall not exceed 20% opacity. The visible emissions test shall be conducted by a certified observer and be a minimum of thirty minutes in duration, unless otherwise specified. The test observation period shall include the period during which the highest opacity can reasonably be expected to occur. [Rule 62-296.320(4)(a)(2) and (b), F.A.C.; and, BACT Determination of January 2, 1981.]

B.5. VE. There shall be no visible emissions (i.e. opacity equal to or less than 5%) to the ambient atmosphere from any point of the No. 4 Fertilizer Shipping Plant when application of a dust suppressant is being used to control particulate emissions in lieu of operation of the evacuation and scrubber dust control system. [Rule 62-296.320(4), F.A.C.; and, Permit No. AC53-239194.]

B.6. Particulate matter (PM). PM emissions shall not exceed 0.03 grains/dscf nor 10.54 pounds per hour (based upon a maximum exhaust gas flow rate of 41,000 dscfm). Based upon the hours of operation limitation of Condition **B.3.**, this results in a maximum annual emission rate limitation of 31.6 tons in 12 consecutive month period. [Rule 62-296.320(4), F.A.C.; BACT Determination, January 2, 1981; and, Permit No. AC53-239194.]

B.7. PM Emissions. Particulate Matter (PM) emissions will be controlled 100% by dust suppressant. [Rule 62-4.070(1)&(3), F.A.C.; and, Applicant Request, Letter dated October 28, 2004.]

B.8. PM Emissions. Any deviation from 100% dust suppressant to control PM emissions will result in compliance action and submittal of a Compliance Assurance Monitoring (CAM) Plan by the permittee for the

scrubber. The conditions for the scrubber will remain in the permit. The scrubber will be used for moisture control in shipping building during loading operations. [Rule 62-4.070(1)&(3), 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.

B.9. 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.10. Excess Emissions Prohibited. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

Monitoring of Operations

B.11. The scrubber shall be operated at or above the following minimum operating parameters established below:

Air Pollution Control Equipment	Parameter	Minimum Limitation	Units	Averaging Time
Scrubber	Flow	170	GPM	3 hr
	Pressure Drop	2.5	in. H_2O	3 hr

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

Test Methods and Procedures

B.12. 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
22	Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares

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.]

B.13. 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.}

B.14. Annual Compliance Tests Required. During each calendar year (January 1st to December 31st), each EU shall be tested to demonstrate compliance with the emissions standards for VE. A performance test on the

dust suppressant dust control system shall be conducted as specified in Specific Condition **B.15.** [Rule 62-297.310(8), F.A.C.]

{Permitting Note: Tests which are only required once during the term of a permit prior to obtaining a renewed permit should be performed roughly five years from the previous test.}

B.15. Compliance Tests Prior To Renewal. Except as provided in Rule 62-297.310(8)(b)3., F.A.C. (see Specific Condition **TR7.b.(3)** in Appendix TR - Facility-wide Testing Requirements), in addition to the annual compliance tests specified above, compliance tests shall also be performed for PM prior to obtaining a renewed operation permit to demonstrate compliance with the emission limits in Specific Condition **B.6.** [Rules 62-210.300(2)(a) and 62-297.310(8)(b), F.A.C.]

B.16. Additional Required VE Compliance Tests. The permittee shall conduct a visible emissions performance test within 30 days of changing the type(s) or brand of dust suppression oils used at the No. 4 Fertilizer Shipping Plant. The report shall at a minimum include the following:

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

[Rule 62-4.070(1)&(3), F.A.C.; and, Permit No. AC53-239194.]

B.17. Recordkeeping. In order to document compliance with Specific Conditions **B.1**., **B.3.** & **B.11**., the permittee shall maintain the following records:

a. Daily, monthly and the most recent 12-consecutive month total hours of operation of the No. 4 Fertilizer Shipping Plant (time periods operated, and total hours/day and hours/month);
b. Quantity of product loaded out each day (tons/day);
c. Daily average product loading rate (tons/hr);
d. For each period of operation, a statement of whether the evacuation and scrubber dust control system was in service or whether dust suppressant oil was being applied to the product being processed;
e. For each period when dust suppressant oil was being used to control particulate emissions, a description of, and rate of application of the suppressant oil (gallons/minute or hour);
f. For each period when the evacuation and scrubber dust control system was in service to control particulate emissions, a log of the following scrubber parameters shall be kept:
   1) pressure drop across the scrubber (in inches W.G.);
   2) water flow in GPM;
   3) scrubber fan amps;
   4) visual verification that the scrubber pump is operating properly.

   An entry shall be made in the scrubber operation log for each of the above parameters at least once per shift.

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

Recordkeeping and Reporting Requirements

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

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Subsection C. Emissions Unit 004
No. 3 Fertilizer Shipping Plant

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

EU No.	Brief Description
004	No. 3 Fertilizer Shipping Plant

The No. 3 Fertilizer Shipping Plant has a maximum permitted MAP/DAP product railcar loading rate of 385.0 tons per hour. The product loading system includes material conveyors, transfer points, two parallel screens, a surge bin, a weigh belt and loading spouts.

All material transfer points are located inside the material handling building and are covered to prevent fugitive emissions. The rail car loading operations are beneath the building and enclosed on two sides. Loading is done via a chute feeder which is also controlled by full-time utilization of dust suppressant to control the generation of dust. Fertilizer product is loaded into trucks inside of the fertilizer storage warehouse with the doors closed to minimize fugitive dust emissions.

*{Permitting Note: This emissions unit is regulated under Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards. This emissions unit is exempted from Particulate Matter RACT (Rule 62-296.700(2)(b), F.A.C., and refer to Specific Condition **C.4.**)}*

Essential Potential to Emit (PTE) Parameters

C.1. Permitted Capacity. The maximum railcar MAP/DAP product loading rate shall not exceed 385.0 tons per hour (daily average basis) and 2,310,000 tpy (12-consecutive month basis). [Rules 62-4.160(2) & 62-210.200, PTE, F.A.C.; and, Permit No. 1050046-017-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 a maximum of 6,000 hours in any 12 month consecutive period. [Rule 62-210.200, PTE, F.A.C.; and, Permit No. 1050046-017-AC.]

Emission Limitations and Standards

Unless otherwise specified, the averaging time(s) for Specific Condition **C.4.** is based on the specified averaging time of the applicable test method.

C.4. Visible Emissions. Visible emissions shall not exceed 5% to the ambient atmosphere from any point of the No. 3 Fertilizer Shipping Plant. Full-time utilization of dust suppressant is used to control the generation of dust. [Rule 62-4.070(1)&(3), F.A.C.; and, Applicant Request dated August 5, 1994.]

Test Methods and Procedures

C.5. Test Methods. When required, tests shall be performed in accordance with the following reference method:

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

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

C.6. 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.}

C.7. Annual Compliance Tests Required. During each calendar year (January 1st to December 31st), this EU shall be tested to demonstrate compliance with the emissions standards for VE. [Rule 62-297.310(8), F.A.C.]

C.8. Additional Compliance VE Test Requirements. The permittee shall conduct a visible emissions performance test within 30 days of changing the type(s) or brand of dust suppression oils used at the No. 3 Fertilizer Shipping Plant. The report shall, at a minimum, include the following:
a. The specific type of dust suppression oil to be used (include a MSDS sheet on this material if available);
b. The point of application of the dust suppression oil, the minimum rate at which it will be applied, and a description of how the rate of application will be controlled and measured (for the purposes of recordkeeping);
c. Statement of the results of observation of visible emissions from transfer and loading points when dust suppression oil is being applied at the minimum rate.
[Rule 62-4.070(1)&(3), F.A.C.]

Recordkeeping and Reporting Requirements

C.9. Recordkeeping Schedule. Daily records shall be completed within five (5) business days and monthly records shall be completed by the end of the next month. These records shall be kept at the facility for at least five (5) years and made available to the Department. [Rule 62-4.070(1)&(3), F.A.C.; and, Permit No. 1050046-017-AC.]

C.10. Recordkeeping. In order to document compliance, the permittee shall maintain the following records:

Daily:
a. Material loading rate during operation (tons per hour on daily basis);
b. Hours of operation;
c. A description of, and rate of application of the suppressant oil (gallons/minute or hour);

Monthly:
a. Total amount of material loaded (tons per 12-consecutive months);
b. Total hours of operation for the 12-consecutive months.

[Rule 62-4.070(1)&(3), F.A.C.; and, Permit No. 1050046-017-AC.]

C.11. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

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Subsection D. Emissions Unit 010
Wet Process Phosphoric Acid Plant (No. 4 & No. 5 Combined)

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

EU No.	Brief Description
010	Wet Process Phosphoric Acid Plant (No. 4 & No. 5 Combined)

The Phosphoric Acid Plant (No. 4 -- V-Train, and No. 5 -- U-Train) has a design feed rate of 200 tons per hour equivalent P_2O_5 feed input. Fluoride emissions from the following sources are controlled by three separate scrubbers; one venturi scrubber and two cross flow packed scrubbers with an air flow rate range of 22,000 to 30,000 ACFM: No. 4 and No. 5 reactors, No. 3, No. 4, and No. 5 filters (filter feed box only), No. 3, No. 4, and No. 5 filtrate tanks (hot wells), No. 4 and No. 5 barometric condenser seal tanks, No. 1 and No. 2 Evaporator FSA Seal Tank, and No. 3 and No. 4 Evaporator FSA Seal Tank.

{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); and, Rule 62-296.403, F.A.C., Phosphate Processing. This emissions unit is exempted from the requirements in NSPS, 40 CFR 60, Subpart T effective upon the date that the permittee demonstrates compliance with 40 CFR 63, Subpart AA.}

Essential Potential to Emit (PTE) Parameters

D.1. Permitted Capacity. The equivalent P_2O_5 feed rate of the Nos. 4 and 5 Phosphoric Acid Plants (combined) shall not exceed 200.0 tons P_2O_5 per hour (daily average). [Rules 62-4.160(2) & 62-210.200, PTE, F.A.C.; and, Permit Nos. 1050046-067-AC and 1050046-083-AC]

*{Permitting Note: 714.3 tons per hour of phosphate rock is equivalent to 200 tons of P_2O_5; Phosphate rock is typically 28% P_2O_5, 200 TPH÷0.28 = 714.3 TPH of phosphate rock. See Specific Conditions **D.17.** and **D.18.** for NESHAP requirements for monitoring and recordkeeping of the equivalent P_2O_5 feed rate. "Equivalent P_2O_5 feed rate" means the quantity of phosphorus, expressed as phosphorous pentoxide (P_2O_5), fed to the process.}*

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.]

Emission Limitations and Standards

Unless otherwise specified, the averaging time(s) for Specific Condition **D.4.** is based on the specified averaging time of the applicable test method.

D.4. Fluoride Emissions. Total fluoride emissions shall not exceed 0.012 lbs/ton of equivalent P_2O_5 feed. Total Fluoride Emissions shall include elemental fluorine and all fluoride compounds as measured by reference methods specified in 40 CFR 60.204, or equivalent or alternative methods as approved by the Department. [Rule 62-4.070(1)&(3), F.A.C.; Permit No. 1050046-013-AC/PSD-FL-295; and, 40 CFR 63.602(a).]

Excess Emissions

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

D.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.]

D.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.]

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

Monitoring of Operations

D.8. 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 ±5% over its operating range. [40 CFR 60.203(a).]

D.9. 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 ±5% over its operating range. [40 CFR 60.203(c).]

D.10. 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.]

D.11. 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.

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 ±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-U-AP.]

D.12. Scrubber Operating Parameters. In order to provide reasonable assurance that the fluoride emission limitation of Specific Condition **D.3.** 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),
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

D.13. 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.]

D.14. 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.}

D.15. Annual Compliance Tests Required. During each calendar year (January 1st to December 31st), emissions from Nos. 4 and 5 Phosphoric Acid Train scrubbers, and No. 3 Filter process scrubber shall be tested simultaneously to demonstrate compliance with the emissions standards for fluoride [Rule 62-297.310(8), F.A.C; and, 40 CFR 63.606(a).]

D.16. 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

D.17. 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. (1050046), Emission Unit ID No. (E.U. 010) 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.; 40 CFR 60.203; and, Permit No. 1050046-025-AC.]

D.18. Downtime Reporting Requirements. The monitoring devices required by Specific Conditions **D.8.** & **D.9.** 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, Southwest 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.]

D.19. 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).]

D.20. 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.]

D.21. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

Other Requirements

D.22. Alternate Monitoring Methods.

a. The permittee is subject to NESHAP alternate monitoring methods within ASP Request 15-U-AP - Alternate Monitoring Plan to that Required by 40 CFR 63 Subparts AA and BB dated 05/15/2015 (Attachment B); [40 CFR 63.632(a), ASP Request 15-U-AP]; and,
b. The Permittee is subject to NESHAP alternate monitoring methods within ASP Request 19-P-AP - Alternate Monitoring Plan to that Required by 40 CFR 63 Subparts AA and BB dated 11/07/2019 (Attachment F). [40 CFR 63.632(a), ASP Request 19-P-AP.]

D.23. 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 this subpart must establish allowable ranges for operating parameters using the methodology of either paragraph (d)(1) or (2) of this section:

(1) The allowable range for the daily averages of the pressure drop across each scrubber and of the flow rate of the scrubbing liquid to each scrubber in the process scrubbing system is + 20 percent of the baseline average value determined as a requirement of § 63.606(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 this subpart. Allowable ranges may be based upon baseline average values recorded during previous performance tests using the test methods required in this subpart and established in the manner required in § 63.606(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 this subpart 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).]

D.24. 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), as indicated in Specific Condition **D.23.** [40 CFR 63.605.]

D.25. 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).]

D.26. 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).]

D.27. Operational Variations. Pursuant to Rule 62-210.700, F.A.C., Emission Unit -010 is subject to the following: Considering operational variations in types of industrial equipment operations affected by this rule, the Department may adjust maximum and minimum factors to provide reasonable and practical regulatory controls consistent with the public interest. [Rule 62-210.700, F.A.C.; and, Permit No. 1050046-013-AC/PSD-FL-295.]

D.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-U-AP - Alternate Monitoring Plan to that Required by 40 CFR 63 Subparts AA and BB dated 05/15/2015). The owner or operator is responsible for remaining in compliance with any updates made to Subpart A or AA. To establish operating parameters for this emissions unit, the owner or operator must comply and demonstrate with the following:

1) Must comply with all conditions of the ASP Request 15-U-AP,
2) Must comply with all applicable requirements of Subparts A and AA,
3) Specifically notify the department the testing will be for establishing allowable ranges for this emissions unit according to Subparts A and AA,
4) All tests must be precisely conducted according to the MACT standards and all applicable test methods,

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

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

NESHAP 40 CFR 63 Requirements

D.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.]

D.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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Subsection E. Emission Units 012, 032 & 033
Nos. 4, 6 & 5 Sulfuric Acid Plants

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

EU No.	Brief Description
012	No. 4 Sulfuric Acid Plant
032	No. 6 Sulfuric Acid Plant
033	No. 5 Sulfuric Acid Plant

Sulfur dioxide emissions from each sulfuric acid plant (Nos. 4, 5, and 6) is controlled by a dual absorption tower, and acid mist is controlled by high volume (HV) and high efficiency (HE) mist eliminators. Each plant produces a maximum of 2600 tons per day of sulfuric acid (100% H2SO4 basis). Under Permit Nos. 1050046-044-AC and 1050046-069-AC, catalyst in the fourth bed of SAP No. 4 (E.U. ID No. 012) was replaced with 138,000 liters of enhanced cesium catalyst. Under Permit Nos. 1050046-049-AC and 1050046-058-AC, catalyst in the fourth bed of each SAP No. 5 (E.U. ID No. 33) and SAP No. 6 (E.U. ID No. 032) were replaced with 138,000 liters of enhanced cesium catalyst.

{Permitting Notes: These emissions units are 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); and, Rule 296.402, F.A.C., Sulfuric Acid Plants.}

Essential Potential to Emit (PTE) Parameters

E.1. Permitted Capacity. The production rate of sulfuric acid for each plant, measured as 100% H_2SO_4, shall not exceed 2600 tons per day (108.33 tons/hr daily average basis). [Rules 62-4.160(2), 62-210.200, Definitions - PTE, F.A.C.; and, Permit Nos. AC53-271436/PSD-FL-229, 1050046-055-AC and 1050046-058-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.]

Emission Limitations and Standards

Unless otherwise specified, the averaging time(s) for Specific Conditions **E.4.** - **E.8.** is based on the specified averaging time of the applicable test method.

E.4. Visible Emissions. Visible emissions from each plant shall not exceed 10% opacity. The visible emissions test shall be conducted by a certified observer and be a minimum of thirty minutes in duration, unless otherwise specified. The test observation period shall include the period during which the highest opacity can reasonably be expected to occur. [Rules 62-204.800(8)(b), F.A.C. & 62-297.310(5)(b); and, 40 CFR 60.83(a)(2).]

E.5. NOx Emissions. Nitrogen oxide (NOx) emissions from each plant shall not exceed 0.12 pounds per ton of 100% H_2SO_4 produced, or 13.0 pounds per hour or 57 tons per year. [Permit No. AC53-271436/PSD-FL-229.]

E.6. SO_2 Emissions. Sulfur Dioxide emissions from each plant shall not exceed 4 pounds per ton of 100% H_2SO_4 produced, or 433.3 pounds per hour or 1898 tons per year. [Rule 62-204.800(8)(b), F.A.C.; 40 CFR 60.82(a); and, Permit No. AC53-271436/PSD-FL-229.]

E.7. SO_2 Emission Limit. The following SO_2 emission limit applies to the Sulfuric Acid Plant (SAP) Nos. 4, 5 & 6:

a. When all three SAPs are in operation within the same 24-hour block averaging period, a cap of 1,100 lb SO_2/hour, 24-hour block average (6:00 a.m. to 6:00 a.m.) is applicable; and,

b. The cap of 1,100 lb SO_2/hour, 24-hour block average (6:00 a.m. to 6:00 a.m.) applies in scenarios when any combination of any number of the SAPs are not in operation and when any number of the SAPs are in operation.

[Rule 62-4.030, *General Prohibition*, F.A.C.; and, Rule 62-4.210, *Construction Permits*, F.A.C.; Permit No. 1050046-050-AC; and, Administrative Permit Correction No. 1050046-063-AC.]

E.8. H_2SO_4 Mist Emissions. Sulfuric Acid Mist (SAM) emissions from each plant shall not exceed 0.15 pounds per ton of 100% H_2SO_4 produced, or 16.25 pounds per hour or 71.2 tons per year. [Rule 62-204.800(8)(b), F.A.C.; 40 CFR 60.83(a)(1); and, Permit No. AC53-271436/PSD-FL-229.]

Excess Emissions

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

E.9. 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.10. 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.]

E.11. 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.]

E.12. 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

E.13. SO_2 CEMS. For each plant, a continuous emission monitoring system for the measurement of sulfur dioxide shall be calibrated, maintained and operated as specified in 40 CFR 60.84. The span value of the continuous monitor shall be set at 1000 ppm. The permittee shall determine emissions in the units of the applicable standard (lb/ton) in accordance with 40 CFR 60.84(b) or (d). [Rule 62-204.800(8)(b)12., F.A.C.; and, 40 CFR 60.84.]

E.14. SO_2 Emission Compliance Demonstration. For each of the SAP plants, a continuous emissions monitoring system (CEMS) shall be used to determine compliance with the 24-hour block average emission limit for SO_2. The CEMS shall be certified to meet Performance Specification 2 in Appendix B of 40 CFR 60 and the quality assurance procedure specified in Appendix F of 40 CFR 60. [40 CFR 60 Appendices B and F, 60.7, 60.13, 60.84]

Test Methods and Procedures

E.15. 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

Method	Description of Method and Comments
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.]

E.16. 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.}

E.17. Annual Compliance Tests Required. During each calendar year (January 1st to December 31st), each EU shall be tested to demonstrate compliance with the emissions standards for sulfur dioxide, sulfuric acid mist and visible emissions. [Rule 62-297.310(8), F.A.C.]

E.18. Compliance Tests Prior To Renewal. Except as provided in Rule 62-297.310(8)(b)3., F.A.C. (see condition **TR7.b.(3)** in Appendix TR - Facility-wide Testing Requirements), in addition to the annual compliance tests specified above, compliance tests shall also be performed for nitrogen oxides prior to obtaining a renewed operation permit to demonstrate compliance with the emission limits in Specific Condition **E.5.** [Rules 62-210.300(2)(a) and 62-297.310(8)(b), F.A.C.]

{Permitting Note: Tests which are only required once during the term of a permit prior to obtaining a renewed permit should be performed roughly five years from the previous test.}

Recordkeeping and Reporting Requirements

E.19. Actual Emissions Reporting (EU No. 012/SAP No. 4). Permit No. 1050046-044-AC 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. Emissions shall be computed in accordance with the provisions in Rule 62-210.370, F.A.C., which are provided in Appendix TV 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 TV 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.

For this project, the permit requires the annual reporting of actual NOx, SO_2 and SAM emissions for the following emissions unit: EU No. 012 - No. 4 Sulfuric Acid Plant. [Permit No. 1050046-044-AC.]

*{Permitting Note: Baseline emissions of NOx, SO_2 and SAM were determined to be 43 TPY, 1,368 TPY and 11 TPY, respectively. For the purpose of establishing the reporting period for Specific Condition **E.19.**, this unit completed modifications authorized by Permit No. 1050046-044-AC and commenced operation on October 24, 2016. The reporting period begins with the 2017 calendar year and ends with the 2021 calendar year.}*

E.20. Actual Emissions Reporting (EU No. 032/SAP No. 6). Permit No. 1050046-049-AC 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. Emissions shall be computed in accordance with the provisions in Rule 62-210.370, F.A.C., which are provided in Appendix TV 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 TV 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.

For this project, the permit requires the annual reporting of actual Nitrogen Oxides, Sulfur Dioxide and Sulfuric Acid Mist emissions for the following emissions unit: EU No. 032 - No. 6 Sulfuric Acid Plant. [Permit No. 1050046-049-AC.]

*{Permitting Note: Baseline emissions of NOx, SO_2 and SAM were determined to be 29.8 TPY, 1,298.5 TPY and 8 TPY, respectively. For the purpose of establishing the reporting period for Specific Condition **E.20.**, this unit completed modifications authorized by Permit No. 1050046-049-AC and commenced operation on November 2, 2017. The reporting period begins with the 2018 calendar year and ends with the 2022 calendar year.}*

*{Permitting Note: To facilitate reporting annual emissions, as required by Specific Conditions **E.19.** and **E.20.**, the permittee may use the optional Appendix ET in the appendices document. For all overlapping reporting periods in Specific Conditions **E.19.** and **E.20.**, the sum of Annual Emissions for each SAP should be subtracted from the sum of Baseline Actual Emissions for each SAP. If the difference between the sum of Annual Emissions and the sum of Baseline Actual Emissions, after accounting for demand growth for each SAP, exceeds the significant emissions rate for a PSD pollutant (40 TPY for NOx, 40 TPY for SO_2 and 7 TPY for SAM), a discussion of PSD applicability (i.e., the reason the projects authorized by Permit Nos. 1050046-040-AC, 044-AC and 049-AC were major or minor modifications) should be provided.}*

E.21. Actual Emissions Reporting - Permit No. 1050046-055-AC, SAP No. 5 (E.U. ID No. 033). 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. Emissions shall be computed in accordance with the provisions in Rule 62-210.370, F.A.C.

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.;
   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.

For this project, the permit requires the annual reporting of actual NOx, SO_2 and SAM emissions for the following unit: SAP No. 5 (E.U. ID No. 033).

*{Permitting Note: Baseline actual emissions of NOx, SO_2 and SAM were determined to be 43.0, 1,393 and 13.4 TPY, respectively. For the purpose of establishing the reporting period for Specific Condition **E.21.**, this unit completed modifications authorized by Permit No. 1050046-058-AC and commenced operation on September 22, 2018. The reporting period begins with the 2019 calendar year and ends with the 2023 calendar year.}*

[Permit Nos. 1050046-055-AC & -058-AC; and, Rules 62-212.300(1)(e) and 62-210.370, F.A.C.]

E.22. Source Obligation. 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. [Rule 62-212.400(12), F.A.C.]

E.23. Daily and Monthly Recordkeeping. In order to document compliance with Specific Conditions **E.1.** & **E.6.**, the permittee shall maintain a daily record of sulfuric acid plant production rate (in TPD as 100% H_2SO_4) 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% H_2SO_4);
   (3) the sulfuric acid production rate, in tons per hour (daily average)
   (4) the SO_2 emission rate, in pounds per hour (daily average); and
   (5) the SO_2 emission rate, in pounds per ton of 100% H_2SO_4.

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

b. Monthly (Rolling 12-consecutive months). The SO_2 emission rate, tons per year. Monthly records shall be completed by the end of the next month.

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

E.24. Excess SO_2 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 Southwest 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).]

E.25. 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.]

E.26. 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 part 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.]

E.27. 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.]

E.28. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

NSPS 40 CFR 60 Requirements

E.29. 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.]

E.30. 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.]

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Subsection F. Emissions Unit 021
No. 4 Fertilizer Plant

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

EU No.	Brief Description
021	No. 4 Fertilizer Plant

The No. 4 Fertilizer Plant consists of a reactor, granulator, coating oil ribbon blender, dryer, cooler, mills, screens and ancillary equipment. The No. 4 Fertilizer Plant may produce monoammonium phosphate (MAP) fertilizer and diammonium phosphate (DAP) fertilizer product. Urea, urea ammonium nitrate and other nitrogen enhancing materials may be added during the process. Emissions from the dryer pass through the venturi, cyclonic and cross-flow scrubbers. Emissions from the cooler pass through a separate cross-flow scrubber. Emissions from the reactor, granulator, screen vents and material handling systems pass through a separate RGV scrubbing system consisting of venturi, cyclonic and cross-flow scrubbers. The exhaust from all three processes is discharged through a common stack.

{Permitting Notes: This emission unit is regulated under: 40 CFR 63, Subpart BB - NESHAP From Phosphate Fertilizers Production 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); and, Rule 62-296.403, F.A.C., Phosphate Processing.}

Essential Potential to Emit (PTE) Parameters

F.1. Permitted Capacity. The maximum production rate for the No. 4 Fertilizer plant shall not exceed 261 tons of monoammonium phosphate (MAP) or diammonium phosphate (DAP) per hour (daily average basis; 120 TPH @ 100% P_2O_5) and 2,170,212 tons of MAP or DAP per year. [Rules 62-4.160(2) & 62-210.200, Definitions - PTE, F.A.C.; and, Permit No. AC53-246403/PSD-FL-211.]

F.2. Permitted Capacity, Heat Input. The maximum allowable heat input rate to the dryer shall not exceed 40 MMBtu per hour (daily average basis). [Rules 62-4.160(2) & 62-210.200, PTE, F.A.C.; and, Permit No. AC53-246403/PSD-FL-211.]

{Permitting Note: The operating rate limitation applies to the process throughput for the unit and not to the heat input for the product dryer.}

F.3. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]

F.4. Methods of Operation.

a. The dryer shall be fired with natural gas as the primary fuel, or new No. 6 fuel oil. The No. 6 fuel oil is for emergency use only. The fuel oil shall contain no more than 2.4% sulfur, by weight.

b. The oil firing rate for the Fertilizer Plant Dryer shall not exceed 200,000 gallons per year of No. 6 fuel oil. [Rule 62-213.410, F.A.C.; and, Permit No. AC53-246403/PSD-FL-211, BACT determination November 14, 1994.]

{Permitting Note: When this Subsection F. refers to "No. 6 fuel oil" it applies equally to Nos. 2 through 5 fuel oil.}

F.5. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8,500 hours in any 12-consecutive month period. [Rule 62-210.200, PTE, F.A.C.; and, Permit No. AC53-246403/PSD-FL-211.]

Emission Limitations and Standards

Unless otherwise specified, the averaging times for Specific Conditions **F.6.-F.8.** are based on the specified averaging time of the applicable test method.

F.6. Visible Emissions. Visible emissions shall not exceed 10%. The visible emissions test shall be conducted by a certified observer and be a minimum of thirty minutes in duration, unless otherwise specified. The test observation period shall include the period during which the highest opacity can reasonably be expected to occur. [Rule 62-297.310(5)(a), F.A.C.; and, Permit No. AC53-246403/PSD-FL-211.]

F.7. Fluoride Emissions. Fluoride emissions shall not exceed any of the following: 0.060 pound of fluoride per ton of equivalent P_2O_5 feed (30 g/metric ton), 5.50 pounds of fluoride per hour, 23.40 tons of fluorides per year. [40 CFR 60.222; and, Permit No. AC53-246403/PSD-FL-211.]

*{Permitting Note: The fluoride emission limit in Condition **F.7.** of 0.06 lb/ton equivalent P_2O_5 feed is the same as the applicable NESHAP, 40 CFR 63.622(a) limit of 0.06 lb/ton of equivalent P_2O_5 feed.}*

F.8. PM Emissions. Particulate matter (PM) emissions shall not exceed any of the following: 0.19 pounds per ton of equivalent P_2O_5 feed (30 g/metric ton), 22.8 pounds per hour, 96.9 tons per year. [Permit No. AC53-246403/PSD-FL-211, BACT determination November 21, 1994.]

Excess Emissions

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

F.9. 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.10. 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.11. Fugitive Emissions. Fugitive emissions from the process, conveying and storage equipment shall be controlled by sealing and/or venting particulate matter and fumes from the equipment to the pollution abatement system. [Permit AC53-246403/PSD-FL-211.]

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

Monitoring of Operations

F.13. Phosphorus Feed Rate. The permittee shall 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 monitoring device shall have an accuracy of □ 5% over its operating range. [40 CFR 60.203(a); 40 CFR 60.223(a); and, 40 CFR 63.625(a).]

F.14. Scrubber System Pressure Drop. The permittee shall calibrate, maintain and operate a monitoring device which continuously measures and permanently records total pressure drop across each scrubber system. The monitoring device shall have an accuracy of □ 5% over its operating range. [40 CFR 60.203(c); and, 40 CFR 60.223(c)]

F.15. 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. [Rules 62-4.070(1)&(3) F.A.C.]

Continuous Emissions Monitoring Requirements

F.16. 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 ±5% over its operating range.
   2) A "gas" monitoring system as outlined in Table 3 of Subpart BB 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(c); and, ASP Request 15-U-AP.]

Test Methods and Procedures

F.17. 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.; and, 40 CFR 60, Appendix A.]

F.18. 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.}

F.19. Annual Compliance Tests Required. During each calendar year (January 1st to December 31st), this EU shall be tested to demonstrate compliance with the emissions standards for visible emissions, particulate matter and fluorides. [Rule 62-297.310(8), F.A.C.; and, 40 CFR 63.626(a).]

F.20. Compliance Test Fuel Requirement. Compliance testing shall be conducted while firing oil in the dryer, if No. 6 fuel oil has been used in the dryer for a sum total of more than 400 hours from the previous test. If a test is conducted while firing natural gas, and in the 12 month period following the test, No. 6 fuel oil is burned for a sum total of more 400 hours, then an additional emissions test per Condition **F.19**. shall be

conducted, while burning oil in that source, within 30 days of having exceeded the 400 hour oil burning limit.. [Rules 62-297.310(8)(a), and 62-4.070(3), F.A.C.]

{Permitting Note: Tests which are only required once during the term of a permit prior to obtaining a renewed permit should be performed roughly five years from the previous test.}

F.21. Fuel Sulfur Content Test Requirement. If testing is conducted while firing fuel oil in the dryer, compliance with the sulfur content requirement of Condition **F.4.** shall be demonstrated during the test by submitting a Certificate of Fuel Oil Analysis from your fuel oil vendor or a fuel oil sample analysis of the fuel used during the compliance test. [Rule 62-4.070(1)&(3), F.A.C.]

Recordkeeping and Reporting Requirements

F.22. Actual Emissions Reporting. Permit No. 1050046-046-AC 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. Emissions shall be computed in accordance with the provisions in Rule 62-210.370, F.A.C., which are provided in Appendix TV 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 TV 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.

For this project, the permit requires the annual reporting of PM and F emissions for the following unit: EU 021 - No.4 Fertilizer Plant. [Permit No. 1050046-046-AC.]

*{Permitting Note: Baseline emissions of PM and F were determined to be 18.2 TPY and 8.9 TPY, respectively. For the purpose of establishing the reporting period for Specific Condition **F.22**, this unit completed modifications authorized by Permit No. 1050046-046-AC and commenced operation on August 26, 2016. The reporting period begins with the 2017 calendar year and ends with the 2021 calendar year. To facilitate reporting these annual emissions, the permittee may use the optional Appendix ET found in the Referenced Attachments of the Appendices. For all overlapping reporting periods in Specific Conditions **A.28** (see Section III., Subsection A) and **F.22**, the sum of Annual Emissions for each fertilizer plant should be subtracted from the sum of Baseline Actual Emissions for each fertilizer plant. If the difference between the sum of Annual Emissions and the sum of Baseline Actual Emissions, after accounting for demand growth for each fertilizer plant, exceeds the significant emissions rate for a PSD pollutant (25 TPY for PM and 3 TPY for F), a discussion of PSD applicability (i.e., the reason the projects authorized by Permit Nos. 1050046-046-AC and 1050046-052-AC were major or minor modifications) should be provided.}*

F.23. Feed Rate Recordkeeping. The permittee shall maintain a daily record of equivalent P_2O_5 feed by first determining the total mass in tons per hour of phosphorus-bearing feed using a monitoring device for

determining mass flow rate which meets the requirements of **F.13** and then by processing according to 40 CFR 60.224(b)(3). [40 CFR 60.223(b).]

F.24. Fuel Oil Sulfur Content Recordkeeping. In order to document continuing compliance with the maximum sulfur content requirement of Condition **F.4.,** the permittee shall maintain a record of the sulfur content of the fuel oil received for use in the dryer. These records may be based on vendor supplied information or analysis of samples taken by the permittee in accordance with Rule 62-297.440, F.A.C. [Rule 62-4.070(1)&(3), F.A.C.]

F.25. Scrubber Operation Log. 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. The record log shall contain, at a minimum:

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

A record log entry for each scrubber shall be made at least once for every shift when the Ammonium Phosphate Fertilizer Plant operates.

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)&(c), F.A.C.]

F.26. Daily and Monthly Log. A record log(s) shall be established and maintained to document, at a minimum, the following:

Daily:

a. Facility Name, Facility ID No. (1050046), Emission Unit ID No. (021) and Description;
b. Date;
c. Product Mode (DAP or MAP);
d. Total hours of operation;
e. the MAP/DAP production (in tons as 100% P2O5);
f. the MAP/DAP production, in tons;
g. the MAP/DAP production rate, tons per hour (daily average basis; as 100% P2O5);
h. the quantity of natural gas and the quantity of No. 6 fuel oil utilized in the dryer (ft3 and gallons respectively);
i. the sulfur content (percent, by weight) of No. 6 fuel oil utilized in the dryer. The sulfur content may be based upon vendor supplied as-delivered oil sulfur content information, or an oil analysis; and
j. the heat input rate to the dryer, mmBtu/hour (daily average basis).

Monthly:

k. the total hours of operation for each rolling 12-consecutive month period;
l. gallons of No. 6 fuel oil for each rolling 12-consecutive month period (gallon per year); and
m. total MAP/DAP production for each rolling 12-consecutive month period.

[Rule 62-4.070(1)&(3), F.A.C.; and, Permit AC53-246403/PSD-FL-211.]

*{Permitting Note: See NESHAP Conditions (Conditions **F.16.**, **F.28**, **F.31**, **F.32**, **F.33** & **F.34**) as well as 40 CFR 63, Subpart A, for additional recordkeeping requirements.}*

F.27. All test reports submitted to the Department shall include, at a minimum, the following information for the test period:

a. Type of fuel being fired.
b. Heat input rate (MMBtu per hour) and firing rate (MCF per hour or gallons per hour).
c. Material process input rate (tons per hour) and production rate (tons per hour).
d. Scrubber liquid flow rate (gpm).

e. If the test was conducted while firing natural gas, then include a statement of the total hours of dryer operation while firing No. 6 fuel oil, during the 12 consecutive month period prior to the test.

Failure to submit the above information, or operating at conditions which do not reflect normal operating conditions may invalidate the test and fail to provide reasonable assurance of compliance. [Rule 62-4.070(1)&(3), F.A.C.]

*{Permitting Note: See NESHAP Conditions (Conditions **F.16.**, **F.28**, **F.31**, **F.32**, **F.33** & **F.34**) as well as 40 CFR 63, Subpart A, for additional recordkeeping requirements.}*

F.28. 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 phosphorus bearing feed using a monitoring system for measuring mass flowrate which meets the requirements of 40 CFR 63.625(b) and then by proceeding according to 40 CFR 63.626(c)(3). [40 CFR 63.625(b).]

F.29. 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 include the initial and annual performance test reports, excess emissions reports, and the summary report. [40 CFR 63.627.]

F.30. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

Other Requirements & Exemptions

F.31. Alternate Monitoring Methods:

a. The permittee is subject to NESHAP alternate monitoring methods within ASP Request 15-U-AP - Alternate Monitoring Plan to that Required by 40 CFR 63 Subparts AA and BB dated 05/15/2015 (Attachment B). [40 CFR 63.631; and, ASP Request 15-U-AP.]

b. The Permittee is subject to NESHAP alternate monitoring methods within ASP Request 19-P-AP - Alternate Monitoring Plan to that Required by 40 CFR 63 Subparts AA and BB dated 11/07/2019 (Attachment F). [40 CFR 63.632(a); and, ASP Request 19-P-AP.]

F.32. Determining Allowable Range of Scrubber Operation Parameters. Following the date on which the performance test required in § 63.626 is completed, the owner or operator of a new or existing affected source using a wet scrubbing emission control system and subject to emissions limitations for total fluorides or particulate matter contained in this subpart must establish allowable ranges for operating parameters using the methodology of either paragraph (f)(1) or (2) of this section:

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

(2) The owner or operator of any new or existing affected source shall establish, and provide to the Administrator for approval, allowable ranges of baseline average values for the pressure drop across and of the flow rate of the scrubbing liquid to each scrubber in the process scrubbing system for the purpose of assuring compliance with this subpart. Allowable ranges may be based upon baseline average values recorded during previous performance tests using the test methods required in this subpart and established in the manner required in § 63.626(d). As an alternative, the owner or operator can establish the allowable ranges of baseline average values using the results of performance tests conducted specifically

for the purposes of this paragraph using the test methods required in this subpart and established in the manner required in § 63.626(d). The source shall certify that the control devices and processes have not been modified subsequent to the testing upon which the data used to establish the allowable ranges were obtained. The allowable ranges of baseline average values developed pursuant to the provisions of this paragraph must be submitted to the Administrator for approval. The owner or operator must request and obtain approval of the Administrator for changes to the allowable ranges of baseline average values. When a source using the methodology of this paragraph is retested, the owner operator shall determine new allowable ranges of baseline average values unless the retest indicates no change in the operating parameters from previous tests. Any new allowable ranges of baseline average values resulting from the most recent performance test shall be effective on the date following the retest. Until changes to allowable ranges of baseline average values are approved by the Administrator, the allowable ranges for use in § 63.624 shall be based upon the range of baseline average values proposed for approval.
[40 CFR 63.625(d).]

F.33. Maintaining Allowable Range of Scrubber Operation Parameters. On or after the date on which the initial performance (compliance) test is completed, the permittee must maintain daily average 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), as indicated in Condition **F.16**. [40 CFR 63.625]

F.34. Determination of Total Fluoride Emissions. The permittee shall determine compliance with the total fluorides standard as required in 40 CFR 63.626(d), based on the equivalent P_2O_5 computed as indicated in 40 CFR 63.626(f)(3). [40 CFR 63.626(d).]

NESHAP 40 CFR 63 Requirements

F.35. 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.]

F.36. 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 G. Emissions Unit 045, 046, 047 & 050
Molten Sulfur System

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

EU No.	Brief Description
045	Molten Sulfur System - Stack 45 (Pit A), 2000 ton Molt Sulf Pit
046	Molten Sulfur Storage - Vent 44 from 6,000 ton Tank
047	Molten Sulfur System (vent from 3000 ton Surge Tank)
050	Molten sulfur System - Stack 47 (Pit B), 300 ton Molt Sulf Pit

The molten sulfur storage and handling system consists of the following: a rail and truck unloading system, one 3,000 ton molten sulfur storage tank, one 6,000 ton molten sulfur storage tank, one 200 ton molten sulfur truck/railcar unloading pit (Pit A), one 300 ton railcar unloading pit (Pit B), and all of the associated transfer pumps and piping.

Molten sulfur from the (Pit A) 200 ton sulfur unloading pit is pumped directly to the No. 4, 5, and 6 sulfuric acid plants and to the No. 3 fertilizer plant at a combined rate of 2,630 tons per day. Sulfur in excess of that required to supply the sulfuric acid plants is pumped to either the 6,000 ton or the 3,000 ton molten sulfur storage surge tanks. The (Pit A) 200 ton truck/railcar unloading pit has a maximum unloading rate, consisting of one 100-ton capacity railcar and eight 25-ton trucks, of 300 tons per hour. The (Pit B) 300 ton railcar sulfur unloading pit is used to unload up to three 100 ton capacity railcars at a time, for a maximum unloading rate of 300 tons per hour. From the unloading pit, molten sulfur is transferred to either the 6,000 ton storage tank at a maximum rate of 108 tons per hour or the 3,000 ton storage tank at a maximum rate of 157 tons per hour. The molten sulfur storage pits (Pit A and Pit B) are under induced FINAL with the total maximum ventilation rate of 1,500 actual cubic feet per minute (acfm) from Pit A and 3,000 acfm from Pit B. Pit A and Pit B each has a 25 foot tall stack.

{Permitting Note(s): These emissions units are regulated under:

Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD).}

Essential Potential to Emit (PTE) Parameters

G.1. Permitted Capacity. The molten sulfur feed rate to the sulfuric acid plant shall exceed neither 2,630 tons per day (TPD), nor 960,000 tons per year (TPY). [Rules 62-4.160(2), 62-210.200, Definitions - PTE, Permit No. AC53-271436/PSD-FL-229.]

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

Emission Limitations and Standards

G.3. Estimated Maximum Emissions. For emission inventory and PSD purposes, the estimated maximum emissions from the sources in the molten sulfur storage and handling system are:

Pollutant	Total Emissions (TPY)	Maximum Emissions (lb/hr)
Sulfur particles emissions	4.11	0.99
TRS (as H_2S) emissions	5.04	1.22
SO_2	10.51	2.54
VOC emissions	7.49	1.81

[Permit No. 1050046-024-AC.]

Excess Emissions

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

G.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.]

G.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.]

G.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 Southwest District Office of the Department of Environmental Protection in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]

Recordkeeping and Reporting Requirements

G.7. Recordkeeping. In order to document compliance with the requirements of Condition **G.1**., the permittee shall maintain, but not limited to, the following records for the Molten Sulfur Storage and Handling System at the facility and make them available to the Department upon request. The records at a minimum shall include the following:

a. Facility Name, Facility ID No. (1050046), Emission Unit ID Nos. (E.U. 045, 050) and Description;
b. Date;

Daily:

c. Daily molten sulfur receiving rate (in TPD) (Pits A and B);
d. Sulfuric Acid Plants (SAPs) daily sulfur utilization rate (tons per day).
e. Daily records shall be completed within 5 business days.

Monthly:

f. Monthly total sulfur receiving rate (tons per month) (Pits A and B) and total for consecutive 12-months (tons per year, TPY);
g. Sulfuric Acid Plants (SAPs) monthly total sulfur utilization rate (tons per month) and total for consecutive 12-months (tons per year, TPY).

Monthly records shall be completed by the 15th day of the following month.
[Rules 62-4.070(1)&(3) & 62-213.440(1)(b)2.b., F.A.C.; and, Permit 1050046-024-AC.]

G.8. 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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Subsection H. Emission Units 052 & 079
Phosphogypsum Stacks

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

EU No.	Brief Description
052	Bartow Facility Phosphogypsum Stacks
079	Green Bay Facility Phosphogypsum Stacks

Bartow Facility Phosphogypsum Stacks. There are two active phosphogypsum stacks in the facility, the North Stack and the South Stack. The North Stack is used for process water management and the South Stack is accepting gypsum. Hydrogen fluoride is emitted fugitively from the stacks and the cooling pond and is reported in the annual operating report (AOR) submitted by the facility.

Green Bay Facility Phosphogypsum Stacks. There are two phosphogypsum stacks at Green Bay, the reactivated North Stack and the Closed South Stack. The South Stack is used for process water management, and the North Stack is accepting gypsum. The Green Bay Facility has been made inactive upon final issuance of the Mosaic Bartow Title V air operation permit renewal Permit No. 1050046-027-AV. Hydrogen fluoride is emitted fugitively from the stacks and the cooling pond and is reported in the annual operating report (AOR) submitted by the facility.

{Permitting Note: These emissions units are 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

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

NESHAP 40 CFR 61 Requirements

H.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.]

H.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

H.4. NESHAP 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., 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.]

H.5. NESHAP 40 CFR 63 Requirements - Subpart AA. These emissions units 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 requirements of 40 CFR 63, Subpart AA, NESHAP from Phosphoric Acid Manufacturing Plants to which these emissions units are subject 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.]

Subsection H. Emission Units 052 & 079
Phosphogypsum Stacks

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Subsection I. Emissions Unit 085
63 MMBtu/Hour RO Boiler at Green Bay

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

EU No.	Brief Description
085	63 MMBtu/Hour RO Boiler at Green Bay

This 63 MMBtu/Hour boiler is installed at the facility to heat pond water in order to improve the performance of the Green Bay reverse osmosis (RO) system. The boiler is manufactured by Cleaver Brooks.

{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

I.1. Permitted Capacity. The permittee is authorized to operate one natural gas-fired boiler with a heat input rating of no more than 63 million British thermal units per hour (MMBtu/hour). [Permit No. 1050046-073-AC; and, Rule 62-210.200, Definitions - PTE, F.A.C.]

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. Methods of Operation - Fuel. The boiler shall fire only natural gas. [Permit No. 1050046-073-AC; and, Rules 62-210.200, PTE, & 62-296.406(2) & (3), F.A.C.]

I.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 **I.5.** is based on the specified averaging time of the applicable test method.

I.5. Visible Emissions. Visible emissions from this emissions unit shall not exceed 20% opacity, except for one 6-minute period per 1-hour period 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 an initial or annual compliance test.}

Excess Emissions

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

I.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.]

I.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.]

Work Standards

I.8. 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. Each tune-up must be conducted no more than 13 months after the previous tune-up.

a. As applicable, inspect the burner, and clean or replace any components of the burner as necessary;
b. 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;
c. Inspect the system controlling the fuel-to-air ratio, as applicable, and ensure that it is correctly calibrated and functioning properly;
d. Optimize total emissions of carbon monoxide (CO). This optimization should be consistent with the manufacturer's specifications, if available;
e. 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
f. Maintain onsite and submit, if requested by the Department, a report containing the following information:
(1) 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
(2) A description of any corrective actions taken as part of the tune-up.

[Rule 62-296.406(2) & (3), F.A.C.; and, Table 3, item 3 to 40 CFR 63 Subpart DDDDD, 40 CFR 63.7515(d), & 40 CFR 63.7540(a)(10).]

I.9. 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

I.10. Special Compliance Tests. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit, unless the Department obtains other information sufficient to demonstrate compliance. The owner or operator of the emissions unit shall provide a test report on the results of said tests to the Department. [Permit No. 1050046-073-AC; and, Rule 62-297.310(8)(c), F.A.C.]

I.11. 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.]

I.12. 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

I.13. Subpart DDDDD 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. The annual compliance reports must be submitted electronically to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI).

a. Company and Facility name and address;
b. Process unit information;
c. Date of report and beginning and ending dates of the reporting period;
d. The date of the most recent tune-up and the date of the most recent burner inspection if it was not done annually; and
e. 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(a), (b)(1), (c)(1), (c)(5)(i) - (iii), (c)(5)(xiv), (c)(5)(xvii), & (h)(3)]

I.14. 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
c. Notifications required under the subpart.

[40 CFR 63.7555.]

I.15. 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).]

I.16. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

NESHAP 40 CFR 63 Requirements

I.17. 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.]

I.18. 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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Subsection J. Emissions Unit 080
41 MMBtu/hr Firetube Scotch Marine Boiler

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

EU No.	Brief Description
080	41 MMBtu/hr Firetube Scotch Marine Boiler

This auxiliary boiler was manufactured in 1988 by Stone Johnston Corporation (Model No. 8571-01). The unit was installed and commissioned at the Bartow Facility in August 2018 and is used to provide steam for sulfuric acid plant startup and any make-up facility steam as and when needed. The boiler is fired solely on natural gas with a maximum design heat input rate of 41 MMBtu/hr.

Emissions from this boiler are exhausted through a vertical stack which is 14.3 feet tall, has an exit diameter of 2 feet, an exit flow rate of approximately 7,500 acfm, and an exit temperature of 375°F.

{Permitting Note(s): This emission unit is regulated under: 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.; 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

J.1. Permitted Capacity. The boiler is limited to a maximum annual heat input of 35,916 MMBtu/year (≤ 10% annual capacity factor) for a 12-month rolling average period. This annual capacity is based on the total heat input from the natural gas operation. [Rule 62-210.200, Definitions - PTE, F.A.C.; and, Permit No. 1050046-054-AC.]

{Permitting Note: In the application dated 11/30/2017, the applicant requested a ≤ 10% annual capacity factor for the boiler with a maximum design heat input capacity of 41 MMBtu/ hour. This is equivalent to an annual capacity of 35,916 MMBtu/year for a 12-month rolling average period. This makes the boiler a limited-use boiler as defined in 40 CFR 63, Subpart DDDDD.}

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. Methods of Operation - Fuel. This boiler is permitted to be fired with natural gas only. [Rule 62-210.200, PTE & 62-296.406(2) & (3), F.A.C ; and, Permit No. 1050046-054-AC.].

J.4. Hours of Operation. The hours of operation are not limited (8760 hours per year). [Rule 62-210.200, PTE, F.A.C.; and, Permit No. 1050046-054-AC.]

Emission Limitations and Standards

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

J.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.; and, Permit No. 1050046-054-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.}

J.6. Particulate Matter (PM) Emissions. PM emissions shall be controlled by the firing of natural gas. [Rule 62-296.406(2), F.A.C.; and, Permit No. 1050046-054-AC.]

*{Permitting Note: A BACT determination for PM and SO_2 was required for this EU as set forth in Rule 62-296.406, F.A.C. The BACT determinations (dated November 30, 2017) are referenced in Specific Conditions **J.6. & J.7.**}*"

J.7. Sulfur Dioxide (SO_2) Emissions. SO_2 emissions shall be controlled by the firing of natural gas. [Rule 62-296.406(3), F.A.C.; and, Permit No. 1050046-054-AC.]

*{Permitting Note: A BACT determination for PM and SO_2 was required for this EU as set forth in Rule 62-296.406, F.A.C. The BACT determinations (dated November 30, 2017) are referenced in Specific Conditions **J.6. & J.7.**}*

Excess Emissions

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

J.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.]

J.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.]

Monitoring of Operations

J.10. Compliance with Tune-up. This limited-use boiler must complete a tune-up meeting the requirements of the following paragraphs once every 5 years prior to permit renewal. Each tune-up must be conducted no more than 61 months after the previous tune-up.

a. As applicable, inspect the burner, and clean or replace any components of the burner as necessary. The burner inspection may be performed any time prior to the tune-up or delayed until the next scheduled unit shutdown.

b. 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.

c. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly. The inspection may be delayed until the next scheduled unit shutdown.

d. Optimize total emissions of carbon monoxide (CO). This optimization should be consistent with the manufacturer's specifications, if available.

e. 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 CO analyzer.

f. Maintain on-site and submit, if requested by the Department, a report containing the following information:

(1) 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 boiler.

(2) A description of any corrective actions taken as a part of the tune-up.

[Rules 62-4.070(1) & (3), F.A.C.; and 40 CFR 63.7500(c), 63.7515(d), 63.7540(a)(10)(i) – (vi) & (12), and Table 3, item 1 of 40 CFR 63, Subpart DDDDD]

Test Methods and Procedures

J.11. 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.; Appendix A of 40 CFR 60; and, Permit 1050046-054-AC.]

J.12. 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

J.13. Compliance Records. To demonstrate compliance with Specific Condition **J.1**, the permittee is required to maintain fuel use records for the days the boiler was operating. Records shall be maintained on file for a period of 5(five) years. [40 CFR 63.7555(3) & 40 CFR 63.7560(b).]

J.14. 5-year Compliance Report. The permittee shall submit a 5-year Compliance Report by January 31 following the last year in each 5-year compliance period, including the following information. The 5-year Compliance Report must cover the applicable 5-year period from January 1 to December 31. The 5-year compliance report must be submitted electronically to the EPA via the CEDRI.

a) Company and Facility name and address;
b) Process unit information, emission limitations, and operating parameter limitations;
c) Date of report and beginning and ending dates of the reporting period;
d) The total operating time during the reporting period;
e) The date of the most recent tune-up. Include the date of the most recent burner inspection if it was not done on a 5-year period and was delayed until the next scheduled or unscheduled unit shutdown.
f) Statement by a responsible official with the official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

[Rules 62-4.070(1)&(3), F.A.C.; and, 40 CFR 63.7550(a), (b), (c) & (h)(3).]

{Permitting Note: The first 5-year compliance period began on boiler startup (August 2018) and will end on December 31 of 2022.}

J.15. 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
c. Notifications required under the subpart.

[40 CFR 63.7555.]

J.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).]

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

NESHAP 40 CFR 63 Requirements

J.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.]

J.1. 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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Subsection K. Emissions Unit 081

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

EU No.	Brief Description
081	144.5 MMBtu/Hour Package Boiler at Green Bay

Emissions Unit 081 is a Nationwide package boiler with a rated heat input capacity of 144.5 MMBtu/hour. The boiler is fired with natural gas. The boiler produces steam to heat pond water for optimal performance of the Green Bay Reverse Osmosis (RO) plant. The boiler is manufactured by Superior Boiler, Model No. 100-0-399. The stack parameters are: stack diameter, 56"; stack gas exit velocity, 2,410 feet per minute; stack gas exit temperature, 317°F; and stack gas flow rate, 41,213 actual cubic meters per minute. The boiler has a continuous oxygen trim system that maintains an optimum air-to-fuel ratio.

{Permitting Note: This emissions unit is regulated under 40 CFR 60, Subpart A, General Provisions, and Subpart Db, Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units, both adopted and incorporated by reference in Rule 62-204.800(8), F.A.C.; 40 CFR 63, Subpart A, General Provisions, and Subpart DDDDD, NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, both adopted and incorporated by reference in Rule 62-204.800(11), F.A.C.; and Rule 62-296.406, F.A.C., Fossil Fuel Steam Generators with less than 250 MMBtu/hour Heat Input, New and Existing Emissions Units.}

Essential Potential to Emit (PTE) Parameters

K.1. Hours of Operation. This emissions unit may operate continuously (8,760 hours/year). [Rule 62-210.200(PTE), F.A.C.; and Permit No. 1050046-070-AC Specific Condition 3]

K.2. Methods of Operation – Fuels. This emissions unit shall be fired exclusively on natural gas. [Rules 62-296.406(2) & (3), F.A.C.; and Permit No. 1050046-070-AC Specific Condition 4]

Emission Limitations and Standards

Unless otherwise specified, the averaging time for each limit is based on the specified averaging time of the applicable test method.

K.3. Visible Emissions. Visible emissions (VE) shall not exceed 20% opacity, except for one 6-minute period per hour during which opacity shall not exceed 27%. [Rule 62-296.406(1), F.A.C.]

{Permitting Note: This emissions unit will comply with this VE limit by firing natural gas, and an annual VE test is not required. The Department retains the right to require a VE test in the case of a complaint or other special circumstance pursuant to Rule 62-297.310(8)(c), F.A.C.}

K.4. Nitrogen Oxides. Emissions of nitrogen oxides (NO_X), expressed as NO_2, shall not exceed 0.20 lb/MMBtu heat input. [40 CFR 60.44b(a)(1)(ii)]

Work Practice Standards

K.5. Particulate Matter. Emissions of particulate matter (PM) shall be controlled by the firing of natural gas. [Rule 62-296.406(2), F.A.C.]

K.6. Sulfur Dioxide. Emissions of sulfur dioxide (SO_2) shall be controlled by the firing of natural gas. [Rule 62-296.406(3), F.A.C.]

{Permitting Note: Pursuant to 40 CFR 60.42b(k)(2), units firing only gaseous fuel are exempt from the SO_2 emissions limit in 40 CFR 60.42b(k)(1).}

K.7. Tune-Ups. The permittee shall conduct a 5-year tune-up of this emissions unit according to the requirements in paragraphs a through f of this condition. The tune-up must be conducted while burning natural gas. Each tune-up must be conducted no more than 61 months after the previous tune-up. Set the oxygen level no lower than the oxygen concentration measured during the most recent tune-up.

a. As applicable, inspect the burner, and clean or replace any components of the burner as necessary. The burner inspection may be performed any time prior to the tune-up or delayed until the next scheduled unit shutdown.

b. 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.

c. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly. The inspection may be delayed until the next scheduled unit shutdown.

d. Optimize total emissions of carbon monoxide (CO). This optimization should be consistent with the manufacturer's specifications, if available, and with the NO_X requirement of Specific Condition **K.4**.

e. 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 CO analyzer.

f. Maintain on-site and submit, if requested by the Department, a report containing the following information:

(1) 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 boiler.

(2) A description of any corrective actions taken as a part of the tune-up.

[Table 3, item 1 to 40 CFR 63 Subpart DDDDD, 40 CFR 63.7515(d), 40 CFR 63.7540(a)(10)(i) – (vi) & (12)]

{Permitting Note: This boiler is operated with a continuous oxygen trim system that maintains an optimum air-to-fuel ratio. Therefore, it may conduct a tune-up every 5 years rather than annually.}

Excess Emissions

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

K.8. Subpart Db Excess Emissions. For the purposes of Specific Condition **K.11**, excess emissions are defined as any calculated 30-day rolling average NO_X emission rate (measured or predicted) that exceeds the applicable emission limit in Specific Condition **K.4**. [40 CFR 60.49b(h)(4)]

Test Methods and Procedures

K.9. 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
7 or 7E	Determination of NO_X Emissions from Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources

The above methods are described in Appendix A of 40 CFR 60 and are 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]

Compliance Requirements

K.10. Subsequent Compliance Requirements for NO_X. Following the date on which the initial performance test is completed or required to be completed under 40 CFR 60.8, whichever date comes first, the permittee shall upon request determine compliance with the NO_X standard in Specific Condition **K.4** through the use of a 30-day performance test. [40 CFR 60.46b(e)(4)]

{Permitting Note: Mosaic performed the initial 30-day performance test from August 9, 2021, to September 7, 2021.}

Monitoring Requirements

K.11. NO_X Emissions Monitoring. During periods when performance tests are not requested pursuant to Specific Condition **K.10**, NO_X emissions data collected pursuant to Specific Condition **K.12** shall be 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 standard in Specific Condition **K.4**. A new 30-day rolling average emission rate is calculated each steam generating unit operating day as the average of all hourly NO_X emission data for the preceding 30 steam generating unit operating days. [40 CFR 60.46b(e)(4)]

K.12. NO_X Predictive Emissions Monitoring System. The permittee shall monitor steam generating unit operating conditions and predict NO_X emission rates as specified in a plan submitted pursuant to Specific Condition **K.14**. The predictive emissions monitoring system (PEMS) must be installed, certified, operated, and maintained in accordance with Performance Specification 16 of Appendix B to 40 CFR 60. Except as allowed by Section 9.0 of Performance Specification 16, the permittee shall conduct quarterly relative accuracy audits (RAAs) and yearly relative accuracy test audits (RATAs) to satisfy the quality assurance (QA) and quality control (QC) requirements of Performance Specification 16. [40 CFR 60.48b(g)(2) and PS 16 of Appendix B to 40 CFR 60]

{Permitting Note: The permittee has chosen to install and operate a PEMS. The PEMS is for the purposes of excess emissions reporting under 40 CFR 60, Subpart Db.}

Recordkeeping and Reporting Requirements

K.13. Reporting Schedule. The following reports shall be submitted to the Compliance Authority:

Report	Reporting Deadline	Related Conditions
PEMS Plan	360 days after initial startup	**K.14**
NSPS Excess Emissions and Monitoring System Performance/Summary Report	60 days after each semi-annual period	**K.15**
NSPS Subpart Db Semi-Annual Report	60 days after each semi-annual period	**K.19**
NESHAP Subpart DDDDD Semi-Annual Compliance Report	60 days after each semi-annual period	**K.20**

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

K.14. PEMS Plan. The permittee shall submit and maintain a plan that identifies the operating conditions to be monitored for the purposes of Specific Condition **K.12** and the records to be maintained pursuant to Specific Condition **K.18**. The plan shall be submitted within 360 days of the initial startup of the unit. Upon plan approval, the permittee shall maintain records of the predicted NO_X emission rates and the monitored operating conditions, including steam generating unit load, identified in the plan. The plan shall, at minimum:

a. Identify the specific operating conditions to be monitored and the relationship between these operating conditions and NO_X emission rates (i.e., ng/J or lb/MMBtu heat input). Steam generating unit operating conditions include, but are not limited to, the degree of staged combustion (i.e., the ratio of primary air to secondary and/or tertiary air) and the level of excess air (i.e., flue gas O_2 level).

b. Include the data and information that the permittee used to identify the relationship between NO_X emission rates and these operating conditions; and

c. Identify how these operating conditions, including steam generating unit load, will be monitored under Specific Condition **K.12** on an hourly basis by the permittee during periods of operation of the unit; the

quality assurance procedures or practices that will be employed to ensure that the data generated by monitoring these operating conditions will be representative and accurate; and the type and format of the records of these operating conditions, including steam generating unit load, that will be maintained by the permittee under Specific Condition **K.18**.

[Rule 62-213.400(1)(b)1b, F.A.C.; and 40 CFR 60.49b(c)]

K.15. NSPS Excess Emissions Report. The permittee shall submit semi-annual excess emissions reports and/or the summary report form in 40 CFR 60, Subpart A, for any excess emissions that occurred during the reporting period. The reports shall contain the following information:

a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The unit operating time during the reporting period.

b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the unit. The nature and cause of any malfunction (if known), the corrective action taken, or preventative measures adopted.

c. The date and time identifying each period during which the continuous monitoring system (CMS) was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

d. When no excess emissions have occurred or the CMS has not been inoperative, repaired, or adjusted, such information shall be stated in the report.

e. If the total duration of excess emissions for the reporting period is less than 1% of the total operating time for the reporting period and the CMS downtime for the reporting period is less than 5% of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report need not be submitted unless requested by the Department.

f. If the total duration of excess emissions for the reporting period is 1% or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5% or greater of the total operating time for the reporting period, the summary report form and the excess emission report shall both be submitted.

[40 CFR 60.7(c) & (d) and 60.49b(h)(2)]

K.16. Fuel Usage Records. The permittee shall record and maintain records of the amount of fuel combusted during each day and calculate the annual capacity factor for each 6-month 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 CFR 60.49b(d)(1)]

K.17. Fuel Supplier Records. To demonstrate that the unit combusts only natural gas, the permittee shall obtain and maintain fuel receipts (such as a current, valid purchase contract, tariff sheet, or transportation contract) from the fuel supplier that certify that the gaseous fuel meets the definition of natural gas as defined in 40 CFR 60.41b. [40 CFR 60.49b(r)(1)]

K.18. Subpart Db Monitoring Records. The permittee shall maintain records of the following information for each steam generating unit operating day. All records required by this specific condition shall be maintained for a period of 2 years following the date of each record.

a. Calendar date;

b. The average hourly NO_X emission rates (expressed as NO_2) (ng/J or lb/MMBtu heat input) measured or predicted;

c. The average hourly steam generating unit operating conditions, including steam generating unit load, being monitored to predict NO_X emission rates;

d. The 30-day average NO_X 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 NO_X emission rates for the preceding 30 steam generating unit operating days;

e. Identification of the steam generating unit operating days when the calculated 30-day average NO_X emission rates are in excess of the NO_X emission standard in Specific Condition **K.4**, with the reasons for such excess emissions as well as a description of corrective actions taken;

f. 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;

g. Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data;

h. If applicable, identification of "F" factors used for calculations, method of determination, and type of fuel combusted;

i. Description of any modifications to the PEMS that could affect the ability of the PEMS to comply with Performance Specification 16; and

j. Results of PEMS initial certification, and QA/QC assessments and tests to comply with Performance Specification 16 under Appendix B to 40 CFR 60.

[Rule 62-213.440(1)(b)1b, F.A.C.; and 40 CFR 60.49b(g) & (o)]

{Permitting Note: The permittee has chosen to comply with Subpart Db by installing and operating a PEMS.}

K.19. Subpart Db Semi-Annual Report. The permittee shall submit semi-annual reports to the Department with the following information:

a. Certification that only natural gas was combusted in the unit during the applicable reporting period, including the information required under Specific Condition **K.17**; and

b. The information required under Specific Condition **K.18**.

[40 CFR 60.49b(i) & (r)(1)]

K.20. Subpart DDDDD 5-Year Compliance Report. The permittee must submit 5-year compliance reports with the following information. The 5-year compliance report must cover the applicable 5-year period from January 1 to December 31. The 5-year compliance reports must be submitted electronically to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI).

a. Company and Facility name and address.

b. Process unit information.

c. Date of report and beginning and ending dates of the reporting period.

d. The date of the most recent tune-up, including the date of the most recent burner inspection if it was not done annually and was delayed until the next scheduled or unscheduled unit shutdown.

e. 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(a), (b), (c)(1), (c)(5)(i)-(iii), (c)(5)(xiv), (c)(5)(xvii), & (h)(3)]

{Permitting Note: The first 5-year compliance period began upon boiler startup.}

K.21. Subpart DDDDD Records. The permittee must keep records according to the following requirements.

a. Keep a copy of each notification and report submitted to comply with 40 CFR 63, Subpart DDDDD, including any Initial Notification, Notification of Compliance Status, or annual compliance report.

b. Keep records of the tune-ups and any resulting maintenance or corrective actions conducted on the unit.

c. Records must be in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1).

d. Each record must be kept for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The permittee must keep each record on site, or they must be accessible from on site (for example, through a computer network), for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The records can be kept off site for the remaining 3 years.

[40 CFR 63.7555(a)(1) & (2) and 40 CFR 63.7560]

Other Requirements

K.22. 40 CFR 60, Subpart A, General Provisions. This emissions unit must comply with the applicable requirements of 40 CFR 60, Subpart A, General Provisions. [40 CFR 60.1(a)]

K.23. 40 CFR 60, Subpart Db. This emissions unit must comply with the applicable requirements of 40 CFR 60, Subpart Db, Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units. [40 CFR 60.40b(a)]

K.24. 40 CFR 63, Subpart A, General Provisions. This emissions unit must comply with the applicable requirements of 40 CFR 63, Subpart A, General Provisions. The applicable provisions are in Table 10 of Subpart DDDDD. [40 CFR 63.7565]

K.25. 40 CFR 63, Subpart DDDDD. This emissions unit must comply with the applicable requirements of 40 CFR 63, Subpart DDDDD, NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters. [40 CFR 63.7485 and 63.7490(a) & (b)]

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Subsection L. Emission Units 075, 076, 077 & 078
'Existing' Engines

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

EU No.	Brief Description
075	Existing Emergency CI RICE > 500 hp
076	Existing Emergency CI RICE < or equal to 500 hp
077	Existing Non-Emergency CI RICE > 100 hp
078	Existing Non-Emergency CI RICE <100 hp

EU 075 - Existing Emergency Stationary CI RICE > 500 HP, consists of the following stationary emergency* compression ignition (CI) engine at this facility:

Manufacturer & Model Number	HP Rating	Date (Year) of Manuf./Const.	Emergency* Generator Location/Purpose
Cummins Model: KTTA50-G2	2,220	Prior to June 12, 2006	Generator J Substation Power

EU 076 - Existing Emergency Stationary CI RICE < 500 HP, consists of the following stationary compression ignition (CI) engines at this facility:

Manufacturer & Model Number	HP Rating	Date (Year) of Manuf./Const.	Emergency Engine Location/Purpose
Cummins, Model: 6CTAA8.3-21	288	Prior to June 12, 2006	No. 4 SAP Generator
Caterpillar, Model: 3304 PC	155	Prior to June 12, 2006	No. 5 SAP Generator
Caterpillar, Model: 3304 PC, Serial Number: 4B10765	155	Prior to June 12, 2006	No. 6 SAP Generator
Cummins, Model: 6BT5.9-G6	155	Prior to June 12, 2006	E/I Bldg Generator
Cummins, Model: 4BT3.9-G4	93	Prior to June 12, 2006	Foam Bldg Generator No. 4
John Deer, Model: GENB-S2	70	Prior to June 12, 2006	II-C MCC Generator
Cummins	<500	Prior to June 12, 2006	East Gate Generator

EU 077 - Existing Non-Emergency CI RICE > 100 HP, consists of the following stationary compression ignition (CI) Reciprocating Internal Combustion Engine (RICE) engines at this facility:

Manufacturer & Model Number	HP Rating	Date (Year) of Manuf./Const.	Engine Location/Purpose
Detroit, Model No. 60, 12.7L	500	Prior to June 12, 2006	II-C Center Pump
Cummins, Model 6CTA8.3-G2	288	Prior to June 12, 2006	No. 4 Tower Substation

Deutz, Model F6L914	114	Prior to June 12, 2006	R1 Canal Pump, Main Gate
Onan, DFCB-5664447	402	03/17/2004	Deep Well MCC Generator, GEN653

EU 078 - Existing Non-Emergency CI RICE <100 HP, consists of the following stationary compression ignition (CI) Reciprocating Internal Combustion Engine (RICE) engines at this facility:

Manufacturer & Model Number	HP Rating	Date (Year) of Manuf./Const.	Engine Location/Purpose
Perkins**	51	Prior to June 12, 2006	South Stack Seepage

** In order to be considered an emergency RICE subject to the 40 CFR 63 Subpart ZZZZ requirements for emergency CI RICE, the engine must be operated in accordance with the requirements specified in 40 CFR 63.6640(f).*

*** Rented.*

{Permitting Notes:

The Department will accept an official notification regarding the replacement of the rental engines with similar in-kind units or removal from site.

These emergency and general purpose stationary compression ignition (CI) internal combustion engines (shown above) have been exempted from the requirements to obtain an air construction permit because they qualify for the categorical exemptions listed in Rule 62-210.300(3)(a), F.A.C. (specifically, Rule 62-210.300(3)(a)35 and 36, F.A.C. (Emergency Generator and General Purpose internal combustion engines and other RICE). However, they are included in this permit as regulated emission units because, based on their date of manufacture/construction, these are subject to federal rule NESHAP 40 CFR 63 Subpart ZZZZ (National Emission Standards of Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), as adopted and incorporated by reference in Rule e62-204.800(11), F.A.C.

NSPS 40 CFR 60 Subpart IIII (Standards of Performance for Stationary Compression Ignition (CI) Internal Combustion Engines) does not apply to any of these CI engines based on their date of manufacture (i.e., before June 12, 2006).

NESHAP 40 CFR 63 Subpart ZZZZ (National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines) is applicable to these engines as existing stationary Reciprocating Internal Combustion Engines (RICE) at a major source of hazardous air pollutants (HAPs).}

Essential Potential to Emit (PTE) Parameters

L.1. Hours of Operation – Emergency Engines. The following limitations apply individually to each emergency stationary RICE in Emissions Units 075 and 076:

a. Emergency Situations - There is no time limit on the use of emergency stationary RICE in emergency situations. [Rule 62-204.800(11)(b), F.A.C.; and, NESHAP Subpart ZZZZ 40 CFR 63.6640(f)(1)(i).]

b. Maintenance and Testing - These engines are authorized to operate for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units are limited to 100 hours per year. [Rule 62-204.800(11)(b), F.A.C.; and, NESHAP Subpart ZZZZ 40 CFR 63.6640(f)(1)(ii).]

c. Non-emergency Situations - These engines are authorized to operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for

maintenance and testing. [Rule 62-204.800(11)(b), F.A.C.; and, NESHAP Subpart ZZZZ 40 CFR 63.6640(f)(1).]

d. Other Situations - These engines cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity; except that owners and operators may operate the emergency engine for a maximum of 15 hours per year as part of a demand response program if the regional transmission organization or equivalent balancing authority and transmission operator has determined there are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or unacceptable voltage level. The engine may not be operated for more than 30 minutes prior to the time when the emergency condition is expected to occur, and the engine operation must be terminated immediately after the facility is notified that the emergency condition is no longer imminent. The 15 hours per year of demand response operation are counted as part of the 50 hours of operation per year provided for non-emergency situations. The supply of emergency power to another entity or entities pursuant to financial arrangement is not limited by this paragraph, as long as the power provided by the financial arrangement is limited to emergency power. [Rule 62-204.800(11)(b), F.A.C.; and, NESHAP Subpart ZZZZ 40 CFR 63.6640(f)(1).]

e. Engine Startup - During periods of startup the owner or operator must minimize the engine's time spent at idle and minimize the engine's startup time to a period needed for the appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. [Rule 62-204.800(11)(b), F.A.C.; and, NESHAP Subpart ZZZZ 40 CFR 63.6625(h).]

L.2. Hours of Operation – Non-Emergency Engines. The hours of operation for non-emergency engines are not limited. [Rule 62-210.200(PTE), F.A.C.]

Emission Limitations and Operating Requirements

L.3. Work or Management Practice Standards. These requirements apply to each emergency stationary RICE and each non-emergency stationary RICE less than 100 HP.

a. Oil - Change oil and filter every 500 hours of operation or annually, whichever comes first or use an oil analysis program to extend this interval, as provided in f., below. [Rule 62-204.800(11)(b), F.A.C.; and, NESHAP 40 CFR 63 Subpart ZZZZ Table 2d and footnote 1.]

b. Air Cleaner - Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first. [Rule 62-204.800(11)(b), F.A.C.; and, NESHAP 40 CFR 63 Subpart ZZZZ Table 2d.]

c. Hoses and Belts - Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. [Rule 62-204.800(11)(b), F.A.C.; and, NESHAP 40 CFR 63 Subpart ZZZZ Table 2d.]

d. Operation and Maintenance - Operate and maintain the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions or develop and follow 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. [Rule 62-204.800(11)(b), F.A.C.; and, NESHAP Subpart ZZZZ 40 CFR 63.6625(e).]

e. Engine Startup - During periods of startup the owner or operator 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. [Rule 62-204.800(11)(b), F.A.C.; and, NESHAP Subpart ZZZZ 40 CFR 63.6625(h).]

f. Oil Analysis - The owner or operator has the option of using oil analysis to extend the change requirement. The oil analysis must be performed at the same frequency specified for changing the oil. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent of water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent of water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator

must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [Rule 62-204.800(11)(b), F.A.C.; and, NESHAP Subpart ZZZZ 40 CFR 63.6625(i).]

L.4. CO Emissions. The following limits apply to each category of existing non-emergency stationary CI RICE. Compliance with the numerical emission limits (or percent reduction) is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in Specific Condition **L.10**.

a. *100≤HP≤300*. The concentration of carbon monoxide (CO) in the RICE exhaust must be limited to 230 parts per million by volume, dry, or less at 15% oxygen (O_2) (ppmvd @ 15% O_2).

b. *300<HP≤500*. The concentration of carbon monoxide (CO) in the RICE exhaust must be limited to 49 ppmvd or less @ 15% O_2; or CO emissions must be reduced by 70% or more.

[40 CFR 63.6602 and items 3 and 4 of Table 2c to Subpart ZZZZ]

Monitoring of Operations

L.5. Hour Meter. For existing emergency stationary RICE less than or equal to 500 HP, the owner or operator shall install a non-resettable hour meter if one is not already installed. [Rule 62-204.800(11)(b), F.A.C.; and, NESHAP Subpart ZZZZ 40 CFR 63.6625(f).]

Compliance Requirements

L.6. Continuous Compliance. Each unit shall be in compliance with the operating standards in this section at all times. [Rule 62-204.800(11)(b), F.A.C.; and, NESHAP Subpart ZZZZ 40 CFR 63.6605(a).]

L.7. Operation and Maintenance of Equipment. At all times the owner or operator 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. Determination of whether such operation and maintenance procedures are being used will be based on information available to the compliance authority 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. [Rule 62-204.800(11)(b), F.A.C.; and, NESHAP Subpart ZZZZ 40 CFR 63.6605(b).]

Test Methods and Procedures

L.8. Initial Compliance Tests Required. Each non-emergency RICE in Emissions Unit 077 must be tested to demonstrate initial compliance with the applicable CO emission standard in Specific Condition **L.4**. The tests must be conducted according to the requirements of 40 CFR 63, Subpart ZZZZ. The permittee is not required to conduct an initial performance test on a RICE for which a performance test has been previously conducted, but the test must meet all the requirements of 40 CFR 63.6612(b). [40 CFR 63.6612 and 63.6620]

L.9. Compliance Tests Required Prior to Renewal. Unless otherwise exempted under Rule 62-297.310(8)(b)3, each non-emergency RICE in Emissions Unit 077 shall be tested prior to renewal of the facility's Title V air operation permit for compliance with the applicable CO emission standard in Specific Condition **L.4**. The tests must be conducted according to the requirements of 40 CFR 63, Subpart ZZZZ. [Rule 62-297.310(8)(b), F.A.C.; and 40 CFR 63.6620 and Table 4 to Subpart ZZZZ]

L.10. 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

Method	Description of Method and Comments
10	Determination of CO Emissions from Stationary Sources

The above methods are described in 40 CFR 60, Appendix A, and 40 CFR 63, Subpart ZZZZ, 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 and 40 CFR 63, Subpart ZZZZ]

L.11. 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 and 40 CFR 63, Subpart ZZZZ. [Rule 62-297.310, F.A.C.; and 40 CFR 63.6620(b)]

Recordkeeping and Reporting Requirements

L.12. Notification, Performance and Compliance Records.

a. A copy of each notification and report that the owner or operator submitted to comply with this section, including all documentation supporting any Initial Notification or Notification of Compliance Status that the owner or operator submitted.
b. You must keep the records required in Table 6 of the NESHAP, 40 CFR 63 Subpart ZZZZ to show continuous compliance with each emission or operating limitation that applies to you.
c. The owner or operator must keep the records required in 40 CFR 63.6625(e) of this section to show continuous compliance with each emission limitation or operating requirement.
d. The owner or operator must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for demand response operation, the owner or operator must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response.
[Rule 62-204.800(11)(b), F.A.C.; and, NESHAP Subpart ZZZZ 40 CFR 63.6655.]

L.13. Malfunction Records.

a. Records of the occurrence and duration of each malfunction of operation (i.e. process equipment) or the air pollution control and monitoring equipment.
b. Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.6605(b) of this section including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

[Rule 62-204.800(11)(b), F.A.C.; and, NESHAP Subpart ZZZZ 40 CFR 63.6655.]

L.14. Maintenance Records.

a. Records of all required maintenance performed on the air pollution control and monitoring equipment.
b. The owner or operator must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that the stationary RICE and after-treatment control device (if any) are operated and maintained according to its own maintenance plan.
[Rule 62-204.800(11)(b), F.A.C.; and, NESHAP Subpart ZZZZ 40 CFR 63.6655.]

L.15. Record Retention.

a. The owner or operator must keep records in a suitable and readily available form for expeditious reviews.
b. The owner or operator must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record.
[Rule 62-204.800(11)(b) and (d), F.A.C.; NESHAP Subpart ZZZZ 40 CFR 63.6660; and Subpart A 40 CFR 63.10(b)(1).]

L.16. Emergency Situation. If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule required 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 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. [Rule 62-204.800(11)(b), F.A.C.; and, NESHAP 40 CFR 63 Subpart ZZZZ Table 2d, footnote 2.]

L.17. Semiannual Compliance Reports. For each non-emergency RICE with 100≤HP≤500, the permittee must submit a compliance report semiannually (January 1 – June 30 and July 1 – December 31) with the following information:

a. Company name and address;

b. Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report;

c. Date of report and beginning and ending dates of the reporting period;

d. If a non-emergency RICE had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction to minimize emissions in accordance with Specific Condition **L.7**, including actions taken to correct a malfunction.

e. For each deviation from an emission or operating limitation that occurs for a non-emergency RICE where you are not using a continuous monitoring system (CMS) to comply with the emission or operating limitation, the compliance report must contain the following information:

(3) The total operating time of the non-emergency RICE at which the deviation occurred during the reporting period.

(4) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

f. If there no deviations from any emission or operating limitations (as applicable), a statement that there were no deviations from the emission or operating limitations during the reporting period.

[40 CFR 63.6650(b), (c), & (d)]

{Permitting Note: Per 40 CFR 63.6650(f), the semiannual compliance reports required by 40 CFR 63, Subpart ZZZZ, can be submitted with the semiannual monitoring report submitted as required by Condition FW9.}

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

NESHAP 40 CFR 63, Subpart A & ZZZZ Requirements

L.19. 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.]

L.20. 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), 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.]

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Subsection M. Emissions Unit 074
'New' Engines

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

EU No.	Brief Description
074	New Stationary CI RICE

A. This emissions unit consists of the following *Emergency* Diesel Engine:

Manufacturer & Model Number	HP Rating	Date (Year) of Construction	Engine Location/Purpose
Deutz, Model No. F6L914 (Emergency)	113	After June 12, 2006	South Stack Seepage Pump (Pump G-10)
Caterpillar, Model No: 3054C (Emergency)	83	After June 12, 2006	Main Office Power
Kohler, Model KD27V12 (Emergency)	1,195	After June 12, 2006	Green Bay RO 2.0 Generator

B. This emissions unit consists of the following *non-Emergency* Diesel Engines:

Manufacturer & Model Number	HP Rating	Date (Year) of Construction	Engine Location/Purpose
Caterpillar, Model Number C15 ACERT	580	After June 12, 2006	1-R Well (Deep Well)
Caterpillar Model No: S9L00659	460	After June 12, 2006	SW of DAP3 Plant (Generator)
Caterpillar, Model No: E6J0033J	66	After June 12, 2006	Ridgewood Substation/ Generator Power Plant, North of Highway 60 at entrance road (Generator)
Caterpillar, Model No: C4.4 ACERT	156	After June 12, 2006	RO Plant NE of Phosphoric acid plant (Generator)
Caterpillar, Model No: E6J0033J	66	After June 12, 2006	East side of auto shop (Generator)
Deutz, Model No. F41914**	114	After June 12, 2006	West Terry Lagoon Pump
Cummins, Model 6CTA8.3-G2	288	After June 12, 2006	Safety Bldg Generator NE Corner of Fitness Center
Deutz, Model No. D914L04**	76	After June 12, 2006	Creek SR Seepage Return Pump
Scania Industrial Engines - DC 084A **	640	After June 12, 2006	Storm Water System "Main Gate"/powers pump
John Deere, Model # 6090HF485**	384	After June 12, 2006	Green Bay Rain Runoff & Seepage Water Pump
Generac, MDG150DF4	201	11/06/2018	Green Bay RO 1.0 Generator

** "New Engine Note - These engines are considered "new" stationary reciprocating internal combustion engines (RICE) in accordance with the provision of NESHAP Subpart ZZZZ, 40 CFR 63.6590(a)(2), based on its of their date of manufacture/construction.*

*** Rented.*

Applicability

M.1. Applicability. Pursuant to 40 CFR 63.6590(c), these engines must comply with 40 CFR 63, Subpart ZZZZ by meeting the requirements of NSPS 40 CFR 60, Subpart IIII. Pursuant to 40 CFR 63.6590(c), no further requirements apply to the engines under 40 CFR 63, Subpart ZZZZ. [Rules 62-204.800(11) & (8), F.A.C.; and, 40 CFR 63.6590(c)]

Emission Standards

M.2. Emission Standards for Emergency CI ICE. Owners or operators of pre-2007 model year emergency stationary CI ICE with a displacement of less than 10 liters per cylinder that are not fire pumps must comply with the emission standards in Table 1 of 40 CFR 60, Subpart IIII. [40 CFR 60.4205(a)]

M.3. Emission Standards for Non-Emergency CI ICE. Owners and operators of 2007 model year and later non-emergency stationary CI ICE with a displacement of less than 30 liters per cylinder must comply with the emission standards for new CI engines in §60.4201. [40 CFR 60.4204(b).]

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

Monitoring Requirements

M.5. Hour Meter. If you are an owner or operator of 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(a).]

M.6. Particulate Filter. If you are an owner or operator of a stationary CI internal combustion engine equipped with a diesel particulate filter to comply with the emission standards in § 60.4204, the diesel particulate filter must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached. [40 CFR 60.4209(b).]

Compliance Requirements

M.7. Continuous Compliance. Owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in §§ 60.4205 over the entire life of the engine. [40 CFR 60.4206.]

M.8. Compliance Requirements.

1) Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions;
2) Change only those emission-related settings that are permitted by the manufacturer;
3) Meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you;
4) If you are an owner or operator of a CI fire pump engine that is manufactured during or after the model year that applies to your fire pump engine power rating table in table 3 to this subpart and must comply with the emissions standards specified in § 60.4205(c), you must comply by purchasing an engine certified to the emission standards in § 60.4205(c), for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in paragraph (g) of this section;
5) If you are an owner or operator of a 2007 model year and later stationary CI internal combustion engine and must comply with the emission standards specified in §60.4204(b) or §60.4205(b) , you must comply by purchasing an engine certified to the emission standards in § 60.4204(b) or § 60.4205(b) or(c), for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in paragraph (g) of this section.

[40 CFR 60.4211.]

Recordkeeping and Reporting Requirements

M.9. Corrective Action Record. If the stationary CI internal combustion engine is equipped with a diesel particulate filter, the owner or operator must keep records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached. [40 CFR 60.4214(c).]

M.10. Hours of Operation Record. 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 to this subpart, 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).]

Test Methods and Procedures

M.11. 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

M.12. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

NSPS 40 CFR 60, Subpart A & IIII Requirements

M.13. 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.]

M.14. 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.]

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Subsection N. Emissions Unit 088
'New' Diesel Engines for Lime Treatment Process System

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

EU No.	Brief Description
088	New Diesel Engines for Lime Treatment Process System

This emissions unit consists of compression ignition (CI) internal combustion engines (ICE) that support the operation of the Green Bay Facility's lime treatment process system, including providing power for pumps, lighting, slaker units, and other ancillary equipment. All engines use only ultra-low sulfur diesel (ULSD) fuel.

{Permitting Note: These engines are regulated under 40 CFR 60, Subpart A, General Provisions, and Subpart IIII, Standards of Performance for Stationary CI ICE, both adopted and incorporated by reference in Rule 62-204.800, F.A.C. These engines are also affected sources under 40 CFR 63, Subpart ZZZZ, NESHAP for Stationary Reciprocating ICE, adopted and incorporated by reference in Rule 62-204.800, F.A.C. However, under 40 CFR 63.6590(c)(7), new CI stationary RICE less than or equal to 500 HP at a major source of HAP emissions must meet the requirements of Subpart ZZZZ by meeting the requirements of 40 CFR 60, Subpart IIII. Therefore, the engines will comply with Subpart ZZZZ by complying with the requirements of Subpart IIII, and no further requirements apply to the engines under Subpart ZZZZ.}

Equipment

N.1. New CI ICE: The following engines support operation of equipment for the lime treatment process system at the Green Bay Facility. The permittee is authorized to operate any ancillary equipment to operate the engines, such as platforms, piping, instrumentation, and switch relays.

Area	Engine Description/Location	Equipment Type	Engine Rating HP	Engine Rating kW	Tier 4?
Lime Plant Area	Lime Plant Generator	Generator	512.3	382	Yes
	Slaker Feed	10x8 Pump	425	317	Yes
	Slaker Discharge to Mixer A	6" Pump	59	44	Yes
	Mixer A Discharge to Mix Tanks B & C	4" Pump	36	27	Yes
	Mixer B & C Discharge	10x8 Pump	425	317	Yes
	SR South Pond Lime Plant Feed	Super 6" Pump	142	106	Yes
Settling Pond 1	Spray Field A	10x8 Pump	425	317	Yes
	Spray Field B	10x8 Pump	425	317	Yes
	Transfer from Pond 1 to 2 (North)	Super 6" Pump	59	44	Yes
	Transfer from Pond 1 to 2 (South)	6" Pump	59	44	Yes
Settling Pond 2	Spray Field A	10x8 Pump	425	317	Yes
	Spray Field B	Super 6" Pump	142	106	Yes
	Transfer from pond 2 to 1	6" Pump	59	44	Yes
	Transfer from pond 2 to 3	6" Pump	59	44	Yes
Settling Pond 3	Transfer Pump to Outfall	Super 6" Pump	142	106	Yes
	Settling Pond 3 Generator	Generator	40.2	29.98	Yes

[Application No. 1050046-090-AC]

Performance Restrictions

N.2. Authorized Fuel: These engines must use diesel fuel that meets the following requirements on a per-gallon basis:
a. *Sulfur Content*. Maximum sulfur content of 15 parts per million.
b. *Cetane Index or Aromatic Content*. The fuel must have a minimum cetane index of 40 or a maximum aromatic content of 35 volume percent.
[Rule 62-210.200(PTE), F.A.C.; 40 CFR 60.4207(b); 40 CFR 1090.305; and Application No. 1050046-087-AC]

N.3. Hours of Operation: The hours of operation for these engines are not limited. [Rule 62-210.200(PTE), F.A.C.; and Application No. 1050046-087-AC]

Emissions Standards

N.4. Emissions Standards: These engines must meet the following emission standards, in grams per kilowatt-hour (g/kW-hour):

Engine Description	Equipment Type	Engine Rating kW	Emission Limits (g/kW-hour)				
			PM	NO_X	NMHC	NO_X + NMHC	CO
Lime Plant Generator	Generator	382	0.02	0.40	0.19	-	3.5
Slaker Feed	10x8 Pump	317	0.02	0.40	0.19	-	3.5
Slaker Discharge to Mixer A	6" Pump	44	0.03	-	-	4.7	5.0
Mixer A Discharge to Mix Tanks B & C	4" Pump	27	0.03	-	-	4.7	5.5
Mixer B & C Discharge	10x8 Pump	317	0.02	0.40	-	-	3.5
SR South Pond Lime Plant Feed	Super 6" Pump	106	0.02	0.40	0.19	-	5.0
Settling Pond 1 Spray Field A	10x8 Pump	317	0.02	0.40	-	-	3.5
Settling Pond 1 Spray Field B	10x8 Pump	317	0.02	0.40	-	-	3.5
Transfer from Pond 1 to 2 (North)	Super 6" Pump	44	0.03	-	-	4.7	5.0
Transfer from Pond 1 to 2 (South)	6" Pump	44	0.03	-	-	4.7	5.0
Settling Pond 2 Spray Field A	10x8 Pump	317	0.02	0.40	-	-	3.5
Settling Pond 2 Spray Field B	Super 6" Pump	106	0.02	0.40	0.19	-	5.0
Transfer from pond 2 to 1	6" Pump	44	0.03	-	-	4.7	5.0
Transfer from pond 2 to 3	6" Pump	44	0.03	-	-	4.7	5.0
Transfer Pump to Outfall	Super 6" Pump	106	0.02	0.40	0.19	-	5.0
Settling Pond 3 Generator	Generator	29.98	0.03	-	-	4.7	5.5

[Application No. 1050046-090-AC; 40 CFR 60.4204(b), 60.4201(a), 1039.101(b), and Table 1 of 40 CFR 1039.101]

{Permitting Note: CO is carbon monoxide, PM is particulate matter, NO_X is nitrogen oxides, and NMHC is non-methane hydrocarbons. The above standards are based on the power rating of each engine in kW.}

Compliance Requirements

N.5. General Compliance: The permittee must operate and maintain the engines to achieve the emission standards in Specific Condition **N.4.** of this permit section over the entire life of the engines. [40 CFR 60.4206]

N.6. Operation and Maintenance: The permittee must:
a. Operate and maintain the engines (and any control device) according to the manufacturer's emission-related written instructions;
b. Change only those emission-related settings that are permitted by the manufacturer; and

c. Meet the requirements of 40 CFR 1068, as they apply to the engines.

[40 CFR 60.4211(a)]

N.7. Engine Certification: The permittee must comply with the emission standards in Specific Condition **N.4.** of this permit section by purchasing engines certified to meet those emission standards. The engines must be installed and configured according to the manufacturer's emission-related specifications. [40 CFR 60.4211(c)]

Recordkeeping and Reporting requirements

N.8. Fuel Records: The permittee must keep records that validate that the fuel combusted by the engines meets the requirements of Specific Condition **N.2.** of this permit section. [Rule 62-4.070(3), F.A.C.]

Applicable Federal Requirements

N.9. 40 CFR 60, Subpart IIII: These engines must meet all applicable requirements of 40 CFR 60, Subpart IIII. These engines must meet the requirements of 40 CFR 63, Subpart ZZZZ, by meeting the requirements of 40 CFR 60, Subpart IIII. [Rule 62-204.800, F.A.C.; 40 CFR 60.4200(a)(2)(i); and 40 CFR 63.6590(c)(7)]

Test Methods and Procedures

N.10. 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

N.11. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

NSPS 40 CFR 60, Subpart A & IIII Requirements

N.12. 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.]

N.13. 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.]

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Subsection O. Emissions Unit 087
Lime Treatment Process System

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

EU No.	Brief Description
087	Lime Treatment Process System

This emissions unit consists of a lime treatment process system to treat and discharge water accumulated at the Green Bay Facility. The system is a double-liming process, consisting of two spray fields, multiple mobile lime slaker units, and other piping and ancillary equipment. The system primarily emits ammonia and also emits a low amount of particulate matter (< 2 tons/year).

The two spray fields are located in Settling Ponds 1 and 2 and are used to promote the release of dissolved ammonia from the water. The lime slaker units are used to add lime slurry (calcium hydroxide) to Settling Ponds 1 and 2 to increase the pH level of the water.

Equipment

O.1. Lime Treatment Process System: The permittee is authorized to install and operate the necessary equipment to reactivate the Green Bay lime treatment process system, including two new spray fields, mobile lime slaker units, and other ancillary equipment such as piping and other support structures. [Permit No. 1050046-087-AC.]

Performance Restrictions

O.2. Hours of Operation: The hours of operation for this emissions unit are not limited. [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

O.3. Precautions to Prevent Emissions of Unconfined Particulate Matter: The permittee shall operate the equipment within the lime treatment process system in a manner that minimizes the emissions of unconfined particulate matter, including but not limited to:

a. Application of asphalt, water, oil, chemicals, or other dust suppressants to unpaved roads, yards, open stockpiles, and similar activities as needed;

b. Landscaping or planting of vegetation; and

c. Enclosed operation of the lime slaker units.

[Rule 62-296.320(4)(c), F.A.C.; and, Permit No. 1050046-087-AC.]

Emission Standards

O.4. Ammonia Emissions: Ammonia emissions from the operation of the spray fields associated with the lime treatment process system at Green Bay shall not exceed 1,238 tons in any 12-month consecutive period. [Permit No. 1050046-087-AC.]

Recordkeeping and Reporting Requirements

O.5. Records of Ammonia Emissions: To comply with Specific Condition O.4. of this permit section and Rule 62-213.420(3)(c)6, F.A.C.:

a. The permittee shall:

(1) Keep monthly records of the ammonia emitted by the lime treatment process system for at least three years, or for the entire operation of the treatment system if less than three years.

(2) Based on the monthly records, calculate, and record 12-month consecutive totals for the ammonia emissions from the treatment system.

(3) Report ammonia emissions from the lime treatment process system in the facility's Annual Operating Report (AOR).

b. Unless a more accurate method becomes available, emissions of ammonia from the lime treatment process system shall be calculated based on a mass balance that utilizes:

(1) The change in ammonia concentration from the initial concentration in Settling Pond 1 after mixing with the water source to the allowable ammonia concentration of water discharged from the treatment process and

(2) The mass of discharged water.

[Rules 62-4.160(14)(b), 62-210.370(2)(c), and 62-213.420(3)(c)6, F.A.C.]

{Permitting Note: The instructions for DEP Form No. 62-210.900(5), F.A.C., for the AOR indicate that any emissions of ammonia over 5.0 tons/year must be reported on the facility's AOR.}

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Subsection P. Emissions Unit 086
99.9 MMBtu/Hour Natural Gas-Fired Boiler

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

EU No.	Brief Description
086	99.9 MMBtu/Hour Natural Gas-Fired Boiler

This emissions unit will be installed at the facility to heat pond water in order to improve the performance of the Green Bay reverse osmosis (RO) system. The boiler is manufactured by Powerhouse. This boiler replaces EU 085, which is no longer operational due to irreparable damage.

{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 A, General Provisions, and Subpart DDDDD, NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, both adopted and incorporated by reference in Rule 62-204.800, F.A.C.; and 40 CFR 60, Subpart A, General Provisions, and Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, both adopted and incorporated by reference in Rule 62-204.800, F.A.C. Subpart Dc imposes only a recordkeeping requirement.}

Equipment

P.1. Boiler: The permittee is authorized to install and operate one natural gas-fired boiler with a heat input rating of no more than 99.9 million British thermal units per hour (MMBtu/hour). [Rule 62-210.200(PTE), F.A.C.; and, Permit No. 1050046-086-AC.]

Performance Restrictions

P.2. Authorized Fuel: The boiler shall fire only natural gas. [Rules 62-210.200(PTE) & 62-296.406(2) & (3), F.A.C.; and, Permit No. 1050046-086-AC.]

P.3. Hours of Operation: This emissions unit may operate continuously. [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

Emission Standards

P.4. Visible Emissions: Visible emissions from this emissions unit shall not exceed 20% opacity, except for one 6-minute period per 1-hour period 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 an initial or annual compliance test.}

Work Practice Standards

P.5. 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.

a. As applicable, inspect the burner, and clean or replace any components of the burner as necessary;

b. 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;

c. Inspect the system controlling the fuel-to-air ratio, as applicable, and ensure that it is correctly calibrated and functioning properly;

d. Optimize total emissions of carbon monoxide (CO). This optimization should be consistent with the manufacturer's specifications, if available;

e. 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

f. Maintain onsite and submit, if requested by the Department, a report containing the following information:

(1) 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

(2) A description of any corrective actions taken as part of the tune-up.

[Rules 62-296.406(2) & (3), F.A.C.; and, 40 CFR 63.7540(a)(10).]

P.6. 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(3) and 62-296.406(2) & (3), F.A.C.; and, 40 CFR 63.7500(a)(3).]

Testing Requirements

P.7. Special Compliance Tests: When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit, unless the Department obtains other information sufficient to demonstrate compliance. The owner or operator of the emissions unit shall provide a report on the results of said tests to the Department in accordance with the provisions of Specific Condition **10** of this permit section. [Rule 62-297.310(8)(c), F.A.C.]

P.8. Test Requirements: The permittee shall notify the Compliance Authority in writing at least 15 days prior to any required tests. Tests shall be conducted in accordance with the applicable requirements specified in Appendix D (Common Testing Requirements) of this permit. [Rule 62-297.310(9), 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, read the instructions on each screen (and under the Help tabs) to complete the notification.}

P.9. 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.]

Recordkeeping and Reporting Requirements

P.10. Test Reports: The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix D (Common Testing Requirements) of this permit. [Rule 62-297.310(10), F.A.C.]

P.11. 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.

a. Company and Facility name and address;

b. Process unit information;

c. Date of report and beginning and ending dates of the reporting period;

d. The date of the most recent tune-up and the date of the most recent burner inspection if it was not done annually; and

e. 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).]

P.12. 40 CFR 63, Subpart DDDDD Records: 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

c. Notifications required under the subpart.

[40 CFR 63.7555.]

P.13. 40 CFR 60, Subpart Dc Records: 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).]

Other Requirements

P.14. 40 CFR 60, Subpart Dc Requirements: The boiler must meet all applicable requirements of 40 CFR 60, Subpart Dc. [Rule 62-204.800, F.A.C.; and, 40 CFR 60.40c(a).]

P.15. 40 CFR 63, Subpart DDDDD Requirements: The boiler must meet all applicable requirements of 40 CFR 63, Subpart DDDDD. [Rule 62-204.800, F.A.C.; and, 40 CFR 63.7485.]

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