



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southwest District Office
13051 North Telecom Parkway
Temple Terrace, Florida 33637-0926

RICK SCOTT
GOVERNOR

CARLOS LOPEZ-CANTERA
LT. GOVERNOR

JONATHAN P. STEVERSON
SECRETARY

FINAL PERMIT

PERMITTEE

Mosaic Fertilizer, LLC
Riverview Facility
13830 Circa Crossing Drive
Lithia, FL 33547

Air Permit No. 0570008-082-AC
Permit Expires: 06/30/2015
Riverview Facility
Minor Air Construction Permit
Project: To change calculation basis of
emissions from input to production.

Authorized Representative:
Mr. Scott Lehr, Environmental Manager

This is the final air construction permit to revise the method of calculation for particulate matter (PM) and Fluoride (F) emissions of Number 6 Ammoniated Phosphate Plant (AP6, EU NO. 007) and Number 5 Ammoniated Phosphate Plant (AP5, EU NO. 055) from a P₂O₅ input basis to an ammoniated phosphate (AP) production basis. The proposed work will be conducted at the Mosaic Fertilizer, LLC, Riverview Facility (Standard Classification No. 2874). The facility is located in Hillsborough County at 8813 US Highway 41 South, Riverview, Florida. The UTM coordinates are Zone 17, 364.59 km East, and 3082.38 km North. As noted in the Final Determination provided with this final permit, no changes or only minor changes and clarifications were made to the draft permit.

This final permit is organized by the following sections:

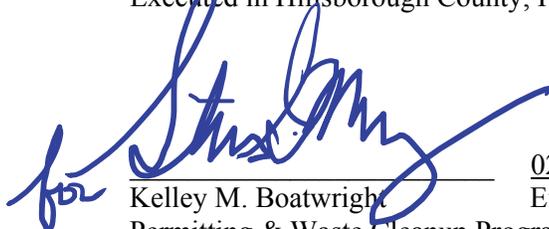
- Section 1. General Information
- Section 2. Administrative Requirements
- Section 3. Emissions Unit Specific Conditions
- Section 4. Appendices

Due to the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of Section 4 of this permit.

This air pollution permit is issued under the provisions of: Chapter 403 of the Florida Statutes (F.S.) and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to conduct the proposed work in accordance with the conditions of this permit. This project is subject to the general preconstruction review requirements in Rule 62-212.300, F.A.C. and is not subject to the preconstruction review requirements for major stationary sources in Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

Upon issuance of this final permit, any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statutes by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel (Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000) and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within 30 days after this order is filed with the clerk of the Department.

Executed in Hillsborough County, Florida



02/20/2015
Effective Date
Kelley M. Boatwright
Permitting & Waste Cleanup Program Administrator
Southwest District

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Final Air Permit package (including the Final Determination, the Final Permit and the Appendices) was sent by electronic mail (or a link to these documents made available electronically on a publicly accessible server) with received receipt requested before the close of business on the date indicated below to the persons listed below.

Mr. Scott Lehr, Mosaic Fertilizer, LLC: scott.lehr@mosaicco.com

Rama Iyer, P.E., Mosaic Fertilizer, LLC (rama.iyer@mosaicco.com)

Diana Lee, P.E., HCEPC: lee@epchc.org

Clerk Stamp

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



(Clerk)

02/20/2015
(Date)

SECTION 1. GENERAL INFORMATION (FINAL)

FACILITY AND PROJECT DESCRIPTION

Existing Facility

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

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

1. Phosphate rock delivered by railcar is unloaded, conveyed to storage, and ground by rotary ball mills.
2. Molten sulfur is burned under controlled stoichiometry to produce sulfuric acid.
3. Ground phosphate rock is acidulated with sulfuric acid, producing wet process phosphoric acid and byproduct calcium sulfate (gypsum) with release of fluoride compounds, including HF.
4. The phosphoric acid, which is approximately 30% by weight phosphorus expressed as P₂O₅, is sent to evaporators for concentration to 54%.
5. Ammoniated phosphate (AP) are produced by combining blended 54% and 30% phosphoric acid with ammonia in various mole ratios to produce mono-ammonium phosphate (MAP) or di-ammonium phosphate (DAP).
6. AP products are conveyed to dry storage buildings by trip conveyors, dropped to storage piles. These storage buildings store, handle and loadout AP product to conveyors and associated transfer equipment, such as bulk totes, feed and loadout elevators, mini bin system, and ribbon blender to load ships, barges, railcars, trucks and containers.

The existing facility consists of the following emissions units (EUs).

Facility ID No. 0570008	
EU ID No.	Emissions Unit Description
<i>Regulated Emissions Units</i>	
004	No. 7 Sulfuric Acid Plant
005	No. 8 Sulfuric Acid Plant
006	No. 9 Sulfuric Acid Plant
007	No. 6 AP Plant
051	Conveyor No. 9 Transfer Points and Railcar Unloading
052	Conveyor No. 9 to Shipping Belt Conveyor
053	Vessel Loading Operation
055	No. 5 Granulation Plant
058	Conveyor No. 6 to Conveyor No. 7
059	Conveyor No. 7 to Conveyor No. 8
060	Screening Tower and Conveyor No. 8 to Conveyor No. 9
061	East Vessel Loading Facility - Shiphold/Chokefeed
063	Molten Sulfur Storage and Handling System – Tank #1, 2 and 3

SECTION 1. GENERAL INFORMATION (FINAL)

066	Molten Sulfur Storage and Handling System -- Pit #7
067	Molten Sulfur Storage and Handling System -- Pit #8
068	Molten Sulfur Storage and Handling System -- Pit #9
073	Phosphoric Acid Production Facility
074	Molten Sulfur Storage and Handling System -- Truck Loading Station
075	AP Storage Building Nos. 2, 4, 5 & 6
076	Loadout between Buildings 2 & 4
077	Loadout adjacent to Building 6
078	Animal Feed Ingredient (AFI) Plant No. 1
079	Diatomaceous Earth (DE) Silo
080	Limestone Silo
081	Animal Feed Plant (AFI) Loadout System
103	Animal Feed Ingredient (AFI) Plant No. 2
104	Phosphogypsum Stack North (No. 1)
108	Phosphogypsum Stack South (No 2.)
109	Clarifier and Storage Tanks
111	Existing Emergency Stationary RICE < or equal to 500 HP
112	Auxiliary Steam Boiler
113	Non-Emergency CI ICE
<i>Unregulated Emissions Units and Activities</i>	
105	<p>Facility-Wide Fugitive Emissions:</p> <ul style="list-style-type: none"> - SO₂, SO₃, SAM emissions from the <u>7, 8 & 9 Sulfuric Acid Plants</u> - Fluoride emissions from the <u>Phosphoric Acid Plant</u> - Fluoride, NH₃, PM emissions from the <u>Nos. 5 & 6 Granulation Plants</u> - Hydrogen Fluoride emissions from the <u>Phosphogypsum Stacks and Cooling Ponds</u> <p><i>Note: For this emissions unit, Annual Operation Report (AOR) emissions estimates are required only for the Hydrogen Fluoride emissions from the Phosphogypsum Stacks and Cooling Ponds.</i></p>

Project Description and Affected/Proposed Emission Units

This project will revise the method of calculation for particulate matter (PM) and Fluoride (F) emissions of Number 6 Ammoniated Phosphate Plant (AP6, EU NO. 007) and Number 5 Ammoniated Phosphate Plant (AP5, EU NO. 055) from a P₂O₅ input basis to an ammoniated phosphate (AP) production basis. This project will modify the following emissions units (EUs).

SECTION 1. GENERAL INFORMATION (FINAL)

EU ID No.	Emissions Unit Description
007	No. 6 AP Plant
055	No. 5 AP Plant

***NOTE:** Please reference the Permit No., Facility ID, and Emission Unit ID in all correspondence, test report submittals, applications, etc.*

{Permitting Note: The designation of “No. 5 Granulation Plant” is being changed to “No. 5 AP Plant” for clarity and nomenclature consistency.}

FACILITY REGULATORY CLASSIFICATION

- The facility is a major source of hazardous air pollutants (HAPs).
- The facility has no units subject to the acid rain provisions of the Clean Air Act (CAA).
- The facility is a Title V major source of air pollution in accordance with Chapter 62-213, F.A.C.
- The facility is a major stationary source in accordance with Rule 62-212.400(PSD), F.A.C.

PERMIT HISTORY/AFFECTED PERMITS

This permit is being processed concurrently with Title V Operation Permit 0570008-081-AV, which will revise current Title V Operation Permit 0570008-079-AV by incorporating conditions of Air Construction Permit 0570008-074-AC. The application for this permit (0570008-082-AC) was submitted as revision to the application for Title V Operation Permit 0570008-081-AV.

SECTION 2. ADMINISTRATIVE REQUIREMENTS (FINAL)

1. Permitting Authority - The permitting authority for this project is the Florida Department of Environmental Protection (Department), Southwest District Office's Air and Solid Waste Permitting Program. The mailing address, phone number and e-mail address is:

Florida Department of Environmental Protection
Southwest District Office
Air and Solid Waste Permitting Program
13051 North Telecom Parkway
Temple Terrace, Florida 33637-0926
Telephone: 813-470-5700
E-mail: SWD_Air_Permitting@dep.state.fl.us

All documents related to applications for permits shall be submitted to the above e-mail address and/or address.

2. Compliance Authority - All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Hillsborough County Environmental Protection Commission (HCEPC). The mailing address and phone number is:

Hillsborough County Environmental Protection Commission
Air Management Division
3629 Queen Palm Dr.
Tampa, FL 33619
Telephone: 813-627-2600

3. Appendices - The following Appendices are attached as part of this permit:

- a. Appendix A. Citation Formats and Glossary of Common Terms;
- b. Appendix B. General Conditions;
- c. Appendix C. Common Conditions; and
- d. Appendix D. Common Testing Requirements.

4. Applicable Regulations, Forms and Application Procedures - Unless otherwise specified in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403, F.S.; and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296 and 62-297, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations.

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

SECTION 2. ADMINISTRATIVE REQUIREMENTS (FINAL)

6. Modifications - Unless otherwise exempt by rule, the permittee shall not initiate any construction, reconstruction, or modification at the facility and shall not install/modify any pollution control device at the facility without obtaining prior authorization from the Department. Modification is defined as: Any physical change or changes in the method of operations or addition to a facility that would result in an increase in the actual emissions of any air pollutant subject to air regulations, including any not previously emitted, from any emission unit or facility.

[Rules 62-210.200 - Definition of “Modification” and 62-210.300(1)(a), F.A.C.]

7. Source Obligation -

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

[Rule 62-212.400(12), F.A.C.]

8. Actual Emissions Reporting - This permit is based on an analysis that compared baseline actual emissions with projected actual emissions and avoided the requirements of subsection 62-212.400(4) through (12), F.A.C. for several pollutants. Therefore, pursuant to Rule 62-212.300(1)(e), F.A.C., the permittee is subject to the following monitoring, reporting and recordkeeping provisions.

- a. The permittee shall monitor the emissions of any PSD pollutant that the Department identifies could increase as a result of the construction or modification and that is emitted by any emissions unit that could be affected; and, using the most reliable information available, calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of 5 years following resumption of regular operations after the change. Emissions shall be computed in accordance with the provisions in Rule 62-210.370, F.A.C., which are provided in Appendix C of this permit.
- b. The permittee shall report to the Department within 60 days after the end of each calendar year during the 5-year period setting out the unit’s annual emissions during the calendar year that preceded submission of the report. The report shall contain the following:
 - 1) The name, address and telephone number of the owner or operator of the major stationary source;
 - 2) The annual emissions as calculated 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.

SECTION 2. ADMINISTRATIVE REQUIREMENTS (FINAL)

- 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 Department requires the annual reporting of actual Particulate Matter and Fluoride emissions for the following unit: EU No. 007, No. 6 AP Plant and the annual reporting of actual Particulate Matter, Fluoride and Sulfur Dioxide emissions for the following unit EU NO. 055, No. 5 AP Plant. [Rules 62-212.300(1)(e) and 62-210.370, F.A.C.; Construction Permit Application dated December 23, 2014 (EPSAP 3943-2)]

9. Application for Title V Air Operation Permit – As this permit is being processed concurrently with Title V Air Operation Permit 0570008-081-AV, which incorporates the terms of this permit, no further Title V air operation permit application will be required for this project.

SECTION 3. EMISSION UNIT SPECIFIC CONDITIONS (FINAL)

B. EU Nos. 007, No. 6 AP Plant and 055, No. 5 AP Plant

This section of the permit addresses the following emissions units (EUs).

EU ID No.	Emissions Unit Description
-007	No. 6 AP Plant
-055	No. 5 AP Plant

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

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

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

PERFORMANCE RESTRICTIONS

- A.1.** Federal Regulatory Requirements - These emission units are subject to 40 CFR 63, Subpart BB – National Emission Standards for Hazardous Air Pollutants From Phosphate Fertilizer Production Plants, which is adopted by reference in Rule 62-204.800, F.A.C.
[Rule 62-204.800(19), F.A.C.]

SECTION 3. EMISSION UNIT SPECIFIC CONDITIONS (FINAL)

B. EU Nos. 007, No. 6 AP Plant and 055, No. 5 AP Plant

A.2. Permitted Capacity. The maximum allowable production and heat input rates are as follows:

EU ID No.	Process Input Rate of P₂O₅	Production Rate of AP	Heat Input Rate	Fuel Type
-007 (No. 6 AP Plant)	2,060 tons per day of P ₂ O ₅ (85.8 tons per hour daily average)	4,478 tons per day of AP (186.6 tons per hour daily average)	80.0 MMBtu/hour daily average (for the rotary dryer)	Natural Gas No. 2 Fuel Oil
-055 (No. 5 AP Plant)	1,764 tons per day of P ₂ O ₅ (73.5 tons per hour daily average)	3,758 tons per day of AP (156.6 tons per hour daily average)	40.0 MMBtu/hour daily average (for the rotary dryer)	Natural Gas No. 2 Fuel Oil

[Rules 62-4.160(2), 62-204.800, 62-210.200(PTE), 62-296.403, 62-296.705, F.A.C.; Construction Permits AC29-196763, 0570008-044-AC / PSD-FL-336 and Construction Permit Application received as EPSAP 3943-2 on December 23, 2014]

A.3. Authorized Fuel - Fuels. The fuels that are allowed to be burned in the rotary dryer are:

(1) Natural gas, and

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

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

A.4. Restricted Operation - The hours of operation are not limited (8760 hours per year).

[Rules 62-4.070(3) and 62-210.200 (definition of Potential to Emit), F.A.C.]

EMISSIONS STANDARDS

A.5. Particulate Matter (PM), Fluoride (F) and Sulfur Dioxide (SO₂) Emissions – PM, F and SO₂ emissions shall not exceed the rates listed below:

E.U. No.	PM/PM₁₀	Fluoride	SO₂
-007 (No. 6 AP Plant)	0.07 lb/ton of product; 12.88 lb/hr; 56.39 ton/yr	0.02 lb/ton of product; 3.00 lb/hr; 13.16 ton/yr	
-055 (No. 5 AP Plant)	0.0817 lb/ton of product; 12.8 lb/hr; 56.1 ton/yr	0.0211 lb/ton of product; 3.3 lb/hr; 14.5 ton/yr	12.7 lb/hr; 2.6 ton/yr

[Rules 62-296.204.800, 62-296.700(4)(b) and 62-296.705 (2)(a), F.A.C.; 40 CFR 63.622(a), Subpart BB; Construction Permits AC29-238303, 0570008-044-AC/PSD-FL-336, Construction Permit Application received December 23, 2014]

SECTION 3. EMISSION UNIT SPECIFIC CONDITIONS (FINAL)

B. EU Nos. 007, No. 6 AP Plant and 055, No. 5 AP Plant

{Permitting Note: The fluoride emission limit in Condition A.5. is more stringent than the applicable NESHAP, 40 CFR 63.622(a) limits of less than 0.06 lb/ton equivalent P₂O₅ feed for AP production. The permittee shall comply with Attachment B – Alternative MACT monitoring plan per Administrative Order No. 03-C-AP dated 1/5/2004 and other applicable requirements of the NESHAP, 40 CFR 63, Subparts A and BB.}

- A.6. Visible Emissions** - Visible emissions from EU 007, No. 6 AP Plant shall not exceed 20% opacity. Visible emissions from EU No. 055, No. 5 Granulation Plant shall not exceed 10% opacity. [Rules 62-296.705(2)(a), F.A.C. and 62-296.320(4)(b)(1), F.A.C.; Construction Permit AC29-196763; BACT determination dated November 25, 1991]

COMPLIANCE TESTING REQUIREMENTS

- A.7. Compliance Tests** - During each federal fiscal year (October 1st to September 30th), these emissions units shall be tested to demonstrate compliance with the emissions standards as shown below:

E.U. No.	PM/PM₁₀	Fluoride**	SO₂*	Ammonia	VE
-007	X	X			X
-055	X	X	X	X	X

[Rule 62-297.310, F.A.C.]

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

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

- A.8. Compliance Test Requirements** - Compliance tests shall be conducted in accordance with the applicable requirements specified in Appendix D (Common Testing Requirements) of this permit. [Rule 62-297.310, F.A.C.]

- A.9. Compliance Test Methods** - Required compliance tests shall be performed in accordance with the following reference methods.

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

SECTION 3. EMISSION UNIT SPECIFIC CONDITIONS (FINAL)

B. EU Nos. 007, No. 6 AP Plant and 055, No. 5 AP Plant

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

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

[Rules 62-204.800 and 297.401, F.A.C.; Appendix A of 40 CFR 60]

- A.10. Compliance Test Methods.** Compliance with the emission limitations of Condition A.5. shall be determined using EPA Methods 1, 2, 3, 4, 5, 6, 9, and 13A or 13B contained in 40 CFR 60, Appendix A and adopted by reference in Chapter 62-297, F.A.C. Ammonia emissions may be determined using a modified EPA Method 6 as submitted to the Environmental Protection Commission of Hillsborough County (EPCHC) on September 12, 1989, or by any other test method agreed upon by the Department and EPCHC. ***For fluorides only***, per Administrative Order No. 03-C-AP dated 1/5/2004 (Attachment B), the Permittee shall conduct the performance (compliance) test according to the procedures in 40 CFR 63, Subparts A and BB.
[Rule 62-297, F.A.C.; 40 CFR 63.626(b) and 63.630(a)]

- A.11. Fuel Analysis Requirements** - If testing is conducted while firing fuel oil in the dryer, compliance with the sulfur content requirement of A.3. shall be demonstrated during the test by submitting either of the following with the test report:
- 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.
- [Rules 62-4.070(3); 62-213.440(1), F.A.C.]

MONITORING REQUIREMENTS

- A.12. CAM Plan.** Emissions Unit EU No. 007-is subject to the Compliance Assurance Monitoring (CAM) requirements contained in the attached Appendix CAM. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedance of a specific emissions limitation; however, it may constitute good reason to require compliance testing pursuant to Rule 62-297.310(7)(b), F.A.C.
[Rules 62-204.800 and 62-213.440(1)(b)1.a., F.A.C.; 40 CFR 64]

NOTIFICATION REQUIREMENTS

- A.13. Test Notification** - The permittee shall notify the Compliance Authority in writing at least 60 days for tests required by 40 CFR 63 and 15 days prior to any other required tests. The notification must include the following information: the date, time, and location of each test; the name and telephone number of the facility's contact person who will be responsible for coordinating the test; and the name, company, and the telephone number of the person conducting the test.

(Permitting Note - The notification should also include the relevant emission unit ID No(s), test method(s) to be used, and pollutants to be tested.)

[Rules 62-4.070(3) and 62-297.310(7)(a)9., F.A.C.]

SECTION 3. EMISSION UNIT SPECIFIC CONDITIONS (FINAL)

B. EU Nos. 007, No. 6 AP Plant and 055, No. 5 AP Plant

RECORDKEEPING AND REPORTING REQUIREMENTS

- A.14. Compliance Test Reports** - The permittee shall prepare and submit reports for all required compliance tests in accordance with the requirements specified in Appendix D (Common Testing Requirements) of this permit.
[Rule 62-297.310(8), F.A.C.]
- A.15. Operational Data** - The permittee shall include the following data with any compliance test report:
- a. Production Data
 - i. the production rate in tons per hour;
 - ii. the raw material input rates, and;
 - iii. the start and end time for the rate determination.
 - b. Scrubber Operating Parameters Data
 - i. the scrubber identification;
 - ii. the type of scrubber liquid;
 - iii. the volumetric liquid flow rate (gpm), and;
 - iv. the total gas scrubber pressure drop (inches water).
 - c. Conditions for the Test Period
 - i. the type of fuel being fired;
 - ii. the heat input rate (mmBtu/hr) and firing rate (Million cubic feet (MCF) per hour or gallons per hour, and;
 - iii. if testing is conducted while firing No. 2 fuel oil in the dryer, compliance with the sulfur content requirement of Specific Condition A.3. shall be demonstrated during the test by submitting either a Certificate of Fuel Oil Analysis from the 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.
- [Rules 62-4.070(3), 62-213.440(1) and 62-297.310(8), F.A.C.; Construction Permit No. 0570008-068-AC]
- A.16. Fuel Oil Sulfur Content**. In order to document continuing compliance with the fuel oil sulfur content Condition A.3., records shall be maintained of the sulfur content, in % by weight, of No. 2 fuel oil delivered for use in the dryer. On the basis of the requirements of Department of Agriculture and Consumer Services Rule 5F-2.001 (which requires that No. 2 oil sold in Florida have a maximum sulfur content not to exceed 0.5%), reasonable assurance that the sulfur content requirement is being met can also be provided through vendor supplied documentation that the fuel oil delivered for use in this boiler meets the specifications for No. 2 oil. The above records shall be maintained and made available to the Department and EPCHC upon request.
[Rule 62-213.440(1), F.A.C.]
- A.17. Dryer Hours of Operation**. In order to document compliance with the requirements of Condition A.3., the permittee shall maintain records of the dryer hours of operation while firing fuel oil.
[Rule 62-213.440(1), F.A.C.]

SECTION 3. EMISSION UNIT SPECIFIC CONDITIONS (FINAL)

B. EU Nos. 007, No. 6 AP Plant and 055, No. 5 AP Plant

A.18. Records: A record shall be maintained to document, at a minimum, the following in order to show compliance with the specific conditions A.2. and A.3.:

Daily

- a. Facility Name, Facility ID No. (0570008), Emission Unit ID No. (EU 007);
- b. Date;
- c. AP Production Mode (DAP, MAP or MicroEssentials);
- d. When operating, record hours of operation and quantity, in tons, of P₂O₅ input and AP production;
- e. Heat input rate to the rotary dryer in mmBtu/hr;
- f. The total hours of the rotary dryer operation using No. 2 oil;
- g. The sulfur content (percent, by weight) of No. 2 oil utilized in the rotary dryer. The sulfur content may be based upon vendor supplied as-delivered oil sulfur content information, or an oil analysis;

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

[Rule 62-213.440(1), F.A.C; Construction Permit No. 0570008-068-AC, Construction Permit Application received December 23, 2014 as EPSAP 3943-2]

Other Requirements

A.19. Operation and Maintenance (O & M) Plan. For AP Plant No. 6, E.U. No. 007 the following Operation and Maintenance (O & M) Plan for Particulate Matter Control submitted by the applicant pursuant to Rule 62-296.700(6), F.A.C., shall be followed:

Control Equipment Data

VENTURI SCRUBBERS (RGCV & DRYER)

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

TAILGAS SCRUBBERS (RGCV & DRYER)

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

SECTION 3. EMISSION UNIT SPECIFIC CONDITIONS (FINAL)

B. EU Nos. 007, No. 6 AP Plant and 055, No. 5 AP Plant

VENTURI SCRUBBER (COOLER)

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

TAILGAS SCRUBBER (COOLER)

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

Process Data

Production Rate:	186.6 TPH AP
Raw Material Input:	DAP: 12 TPH NH ₃ 85.8 TPH P ₂ O ₅
Fuel Usage:	80 MMBtu/hr

Inspection and Maintenance Schedule

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

Recordkeeping Schedule

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

A.20. Abnormal Event Reporting. Not Federally Enforceable. The permittee shall comply with all “abnormal events” requirements associated with these sources on a consistent basis and all abnormal events shall be reported to the Air Management Division of the Environmental Protection Commission of Hillsborough County within thirty (30) minutes of each event. “Abnormal events” would be defined as any of the following:

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

SECTION 3. EMISSION UNIT SPECIFIC CONDITIONS (FINAL)

B. EU Nos. 007, No. 6 AP Plant and 055, No. 5 AP Plant

2. Ammonia emissions in excess of 200.0 pounds per hour during annual testing (ref. Condition B.10.). The thirty-minute notification requirement above is not applicable to this item but the test report shall address actions taken to mitigate this situation.

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