



Florida Department of Environmental Protection

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PERMITTEE

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

Authorized Representative:
Dharma Ramos, EHS Manager

Air Permit No. 0570008-091-AC
Permit Expires: 06/30/2019
Minor Air Construction Permit

Riverview Facility
In-kind Replacement of Chiller
System in AP No. 6

PROJECT

This is the final air construction permit, which authorizes the in-kind replacement of the chiller system in the Ammoniated Phosphate (AP) No. 6 Plant. The proposed work will be conducted at the existing Mosaic Riverview Facility, which is a Phosphate Fertilizer production facility categorized under Standard Industrial Classification No. 2874. The existing facility is located in Hillsborough County at 8813 Hwy 41 South in Riverview, Florida. The UTM coordinates are Zone 17, 363.23 km East and 3082.56 km North.

This final permit is organized into the following sections: Section 1 (General Information); Section 2 (Administrative Requirements); Section 3 (Emissions Unit Specific Conditions); and Section 4 (Appendices). Because of 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.

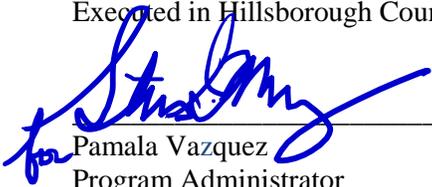
STATEMENT OF BASIS

This air pollution construction 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.

FINAL PERMIT

Executed in Hillsborough County, Florida



Pamala Vazquez
Program Administrator
Permitting & Waste Cleanup Program
Southwest District

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Air Permit package 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 following persons.

Dharma Ramos, Mosaic Fertilizer, LLC (dharma.ramos@mosaicco.com)
Rama Iyer, P.E., Mosaic Fertilizer, LLC (rama.iyer@mosaicco.com)
Diana Lee, EPCHC (Lee@epchc.org)
David Read, DEP DARM, David.Read@dep.state.fl.us

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)

September 5, 2017
(Date)

SECTION 1. GENERAL INFORMATION (FINAL)

FACILITY DESCRIPTION

The existing facility consists of the following emissions units.

Facility ID No. 0570008	
ID No.	Brief 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 AP Plant
058	Conveyor No. 6 to Conveyor No. 7
059	Conveyor No. 7 to Conveyor No. 8
060	Screening Tower and Conveyor No. 8 to Conveyor No. 9
061	East Vessel Loading Facility - Shiphold/Chokefeed
063	Molten Sulfur Storage and Handling System – Tank #1, 2 and 3
066	Molten Sulfur Storage and Handling System -- Pit #7
067	Molten Sulfur Storage and Handling System -- Pit #8
068	Molten Sulfur Storage and Handling System -- Pit #9
073	Phosphoric Acid Production Facility
074	Molten Sulfur Storage and Handling System -- Truck Loading Station
075	AP Storage Building Nos. 2, 4, 5 & 6
076	Loadout between Buildings 2 & 4
077	Loadout adjacent to Building 6
078	Animal Feed Ingredient (AFI) Plant No. 1
079	Diatomaceous Earth (DE) Silo
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
114	Cement Batch Plant
<i>Unregulated Emissions Units and Activities</i>	

SECTION 1. GENERAL INFORMATION (FINAL)

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 AP Plants</u> - Hydrogen Fluoride emissions from the <u>Phosphogypsum Stacks</u> and <u>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>
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PROPOSED PROJECT

This project is to replace in kind the chiller system of the Ammoniated Phosphate Plant No. 6 (EU 007) with a new chiller system having the same process specifications as the existing plant. The replacement plant will have corrosion resistant components of stainless steel alloys or corrosion resistant material coatings in areas where excessive corrosion may occur.

This project will modify the following emissions units.

Facility ID No. 0570008	
ID No.	Emission Unit Description
007	No. 6 AP Plant

FACILITY REGULATORY CLASSIFICATION

- The facility is a major source of hazardous air pollutants (HAP).
- The facility does not operate 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 References current operation permit No. 0570008-090-AV.

SECTION 2. ADMINISTRATIVE REQUIREMENTS (FINAL)

ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: The permitting authority for this project is the Southwest District of the Department of Environmental Protection (Department). 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, Suite 101
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 Environmental Protection Commission of Hillsborough County (EPCHC). The mailing address and phone number is:

Environmental Protection Commission of Hillsborough County
Air Management Division
3629 Queen Palm Drive
Tampa, Florida 33619
Telephone: 813-627-2600

3. Appendices: The following Appendices are attached as a part of this permit:
 - Appendix A (Citation Formats and Glossary of Common Terms);
 - Appendix B (General Conditions);
 - Appendix C (Common Conditions);
 - Appendix D (Common Testing Requirements);
 - Appendix E (40 CFR Subpart A, General Provisions);
 - Appendix F (40 CFR 63 BB National Emissions Standards for Hazardous Air Pollutants From Phosphate Fertilizers Production Plants); and
 - Appendix G (CAM Plan)
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.

SECTION 2. ADMINISTRATIVE REQUIREMENTS (FINAL)

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.]
6. Modifications: The permittee shall notify the Compliance Authority upon commencement of construction. No new emissions unit shall be constructed and no existing emissions unit shall be modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification.
[Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]
7. Construction and Expiration. The expiration date shown on the first page of this permit provides time to complete the physical construction activities authorized by this permit, complete any necessary compliance testing, and obtain an operation permit. Notwithstanding this expiration date, all specific emissions limitations and operating requirements established by this permit shall remain in effect until the facility or emissions unit is permanently shut down. For good cause, the permittee may request that that a permit be extended. Pursuant to Rule 62-4.080(3), F.A.C., such a request shall be submitted to the Permitting Authority in writing before the permit expires.
[Rules 62-4.070(4), 62-4.080 & 62-210.300(1), F.A.C.]
8. Application for Title V Air Operation Permit: This permit authorizes modification of the permitted emissions unit and initial operation to determine compliance with Department rules. A Title V air operation permit is required for continued operation of the permitted emissions unit(s). The permittee shall apply for a Title V air operation permit at least 90 days prior to expiration of this permit, but no later than 180 days after commencing operation or commencing operation as modified. Commencing operation means setting into operation of any emissions unit for any purpose. To apply for a Title V air operation permit, the applicant shall submit the following:
 - a. the appropriate permit application form (*see current version of Rule 62-210.900, F.A.C. (Forms and Instructions)*), and/or FDEP Division of Air Resource Management website at: <http://www.dep.state.fl.us/air/>;
 - b. a copy of the initial compliance test report required by Specific Condition No. A.12., if not previously submitted;
 - c. copies of the most recent month of records/logs specified in Specific Condition No. A.15.; and
 - d. any proposed revisions to the most recently approved O & M PlanThe application shall be submitted to the Permitting Authority with a copy to Environmental Protection Commission of Hillsborough County Air Management Division (Compliance Authority).
[Rules 62-4.030, 62-4.050 and Chapter 62-213, F.A.C.]
9. 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 (DEP) 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),

SECTION 2. ADMINISTRATIVE REQUIREMENTS (FINAL)

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, Post Office Box 3070, Tallahassee, Florida 32315-3070**. Additional information is available by accessing the Title V Annual Emissions Fee On-line Information Center at the following Internet web site: <http://www.dep.state.fl.us/air/emission/tvfee.htm>. [Rules 62-210.370(3), 62-210.900 & 62-213.205, F.A.C.; and, §403.0872(11), Florida Statutes (2013)]
{Permitting Note: Resources to help you complete your AOR are available on the electronic AOR (EAOR) website at: <http://www.dep.state.fl.us/air/emission/eaor>. If you have questions or need assistance after reviewing the information posted on the EAOR website, please contact the Department by phone at (850) 717-9000 or email at eaor@dep.state.fl.us.}

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

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS (FINAL)

A. EU 007, AP Plant No. 6

This section of the permit addresses the following emissions unit.

EU No.	Emission Unit Description
007	No. 6 AP Plant - The AP 6 plant has a venturi cyclonic pre-scrubber that handles evacuation gases from the reactor and rotary granulator and the exit gas stream from this goes to the RGV venturi cyclonic scrubber. Evacuation gases from elevators recycle conveyor and screens also go, via equipment dust cyclone to the RGV venturi cyclonic scrubber. Evacuation gas from the rotary dryer and burner go, via dryer dust cyclone to the dryer venturi cyclonic scrubber and the exit gas from this go to the dryer tailgas scrubber. The AP 6 plant has two stacks, the north and south stacks, and the exit gas stream from the RGV venturi cyclonic scrubber and the dryer tailgas scrubber discharge via the north stack to the atmosphere. Evacuation gases from the rotary cooler (U-21) go, via cooler dust cyclone to the cooler venturi scrubber and on to the cooler tailgas scrubber to discharge to atmosphere via the south stack.

FEDERAL REGULATIONS

A.1. Federal Regulatory Requirements: This emission unit is subject to 40 CFR 63, Subpart A – General Provisions and 40 CFR 63, Subpart BB – National Emission Standards for Hazardous Air Pollutants From Phosphate Fertilizers Production Plants, which are adopted by reference in Rule 62-204.800, F.A.C. [Rule 62-204.800, F.A.C.]

EQUIPMENT

A.2. Ammoniated Phosphate Plant No. 6 chiller system: The permittee is authorized to replace in kind the chiller system of the Ammoniated Phosphate Plant No. 6 (EU 007) with a new chiller system having the same process specifications as the existing plant. [Application No. 0570008-091-AC]

PERFORMANCE RESTRICTIONS

A.3. Permitted Capacity: The maximum allowable production and heat input rates are as follows:

EU 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

[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]

A.4. Authorized Fuel: The fuel that is allowed to be burned in the rotary dryer is natural gas. [Rule 62-213.410, F.A.C.; Construction Permits AC29-196763, AC29-238303, 0570008-057-AC.]

A.5. Restricted Operation: The hours of operation are not limited (8760 hours per year). [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS (FINAL)

A. EU 007, AP Plant No. 6

EMISSIONS STANDARDS

- A.6. Emissions Standards Particulate Matter (PM), Fluoride (F) and SO₂ emissions shall not exceed the rates listed below:

EU No.	PM/PM ₁₀	Fluoride	VE
-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	20%

[40 CFR 63.622(a); Rules 62-204.800, 62-296.320(4)(b)(1), 62-296.700(4)(b), and 62-296.705(2)(a), F.A.C.; Construction Permits AC29-238303, 0570008-082-AC, and 0570008-044-AC/PSD-FL-336]

TESTING REQUIREMENTS

- A.7. Initial Compliance Tests: The emissions unit shall be tested to demonstrate initial compliance with the emissions standards for PM/PM₁₀, Fluoride, Ammonia and VE. The initial tests shall be conducted within 60 days after achieving permitted capacity, but not later than 180 days after initial operation of the unit. [40 CFR 63.626(a)(1) and 63.630(a); Rules 62-4.070(3) and 62-297.310(8)(b)1, F.A.C.]
- A.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.]
- A.9. Test Methods: Required tests shall be performed in accordance with the following reference methods.

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

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

[Rules 62-297.401 and 62-204.800, F.A.C.; 40 CFR 63.626(b) and 63.630(a) and Appendix A of 40 CFR 60]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS (FINAL)

A. EU 007, AP Plant No. 6

MONITORING REQUIREMENTS

- A.10. 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. [40 CFR 64; Rules 62-204.800 and 62-213.440(1)(b)1.a., F.A.C.]

NOTIFICATION REQUIREMENTS

- A.11. Notification of Operation Commencement: The permittee shall notify the Compliance Authority in writing of the date of commencing operation of the EU No. 007 after completing the modifications authorized by this permit, no later than fifteen (15) days after that date. Commencing operation means setting into operation of any emissions unit for any purpose. [Rules 62-4.070, and 62-210.200, F.A.C., (definition of Commence Operation)]

RECORDS AND REPORTS

- A.12. 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. For each test run, the report shall also indicate:
- Type of fuel being fired;
 - Heat input rate (mmBtu/hr) and firing rate (Million cubic feet (MCF) per hour;
- [Rule 62-297.310(10), F.A.C.; Construction Permit No. 0570008-068-AC]
- A.13. Operational Data, Production: The permittee shall include the following production data in compliance test reports.
- the production rate in tons per hour;
 - the raw material input rates and;
 - the start and end time for the rate determination.
- [Rule 62-4.070(3), F.A.C.]
- A.14. Operational Data, Scrubber Parameter: The permittee shall include the following scrubber parameter data in compliance test reports.
- The scrubber identification;
 - Type of scrubber liquid;
 - Volumetric liquid flow rate (gpm), and;
 - Total gas scrubber pressure drop (inches water gauge).
- [Rule 62-4.070(3), F.A.C.]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS (FINAL)

A. EU 007, AP Plant No. 6

- A.15. Daily Log: The permittee shall maintain logs containing at a minimum the following:
- a. Facility Name, Facility ID No. (0570008), Emission Unit ID No. (EU No. 007 or 055);
 - b. Date;
 - c. AP Production Mode (DAP, MAP or MicroEssentials™);
 - d. When operating, record hours of operation and quantity, in tons, P₂O₅ input and AP production;
 - e. Heat input rate to the rotary dryer in mmBtu/hr;
 - f. Heat input rate to the rotary dryer, mmBtu/hr (daily average).

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

The record shall be retained at the facility for a minimum of five (5) years and shall be made available to the Permitting and Compliance Authorities upon request.

[Rule 62-213.440(1), F.A.C; Construction Permits Nos. 0570008-068-AC and 0570008-082-AC]

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

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

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

- A.17. Operation and Maintenance (O & M) Plan for Particulate Matter Control: For air pollution control devices and collection systems, the permittee shall maintain and implement an O & M Plan to include a schedule for the maintenance and inspection of each control device, collection systems, and auxiliary equipment. Records of inspections, maintenance, and performance data of control devices and auxiliary equipment shall be retained by the emissions unit for a minimum of two (2) years and shall be made available to the Compliance Authority upon request. The performance parameters shall include operating rates and efficiencies. Such parameters and records shall include, at a minimum, that shown below.

Control Equipment Data

VENTURI CYCLONIC SCRUBBER DRYER

Manufacturer:	Wellman Power Gas
Model:	N/A
Type:	Venturi <u>Cyclonic</u> Scrubber (Dryer)
Design total Flow:	DRYER 100,000 ACFM
Design Gas-to-Liquid Ratio:	DRYER 115 ACF/gal.
Efficiency Rating: (at design capacity)	90%

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS (FINAL)

A. EU 007, AP Plant No. 6

Design Pressure Drop: 10-25" w.g.
Scrubbing Liquor Composition: Pondwater

VENTURI CYCLONIC SCRUBBER (RGV)

Manufacturer: Wellman Power Gas
Model: N/A
Type: Venturi Cyclonic Scrubber (RGV)

Design Gas-to-Liquid Ratio: RGCV 100 ACF/gal.
Design total Flow: RGCV 60,000 ACFM
Efficiency Rating: 99%
(at design capacity)
Design Pressure Drop: 0.5" w.g. RGCV
Scrubbing Liquor Composition: Pondwater

DRYER TAILGAS SCRUBBER (AP6)

Manufacturer: Pegasus TSI
Model: N/A
Type: Packed bed tailgas scrubber, up-flow
Design L/G ratio: 12.9 (gal/1,000 ft³)
Design total flow: 75,000 acfm
Efficiency rating: 80%
Design pressure drop: 5.19" w.g.
Scrubbing liquor composition: Freshwater (closed loop)

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: 90%
(at design capacity)
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: 99%
(at design capacity)

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS (FINAL)

A. EU 007, AP Plant No. 6

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 NH₃
85.8 TPH P₂O₅
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]