Florida Department of Environmental Protection

Northeast District
8800 Baymeadows Way West, Suite 100
Jacksonville, Florida 32256

Rick Scott
Governor

Carlos Lopez-Cantera
Lt. Governor

Noah Valenstein
Secretary

PERMITTEE

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

Authorized Representative:
William M. Ponton, General Manager

Air Permit No. 0470002-119-AC
Permit Expires: **May 7, 2019**
Minor Air Construction Permit

Suwannee River/Swift Creek Complex
Changes to the process for existing
EU008 "Y" Train

PROJECT

This is the final air construction permit, which authorizes changes to existing EU008 "Y" Train (#1 MAP/DAP Plant) to add a Mode of operation for the addition of micronutrients to the process; replace the existing preneutralizer with a new same capacity one; replace pumps, piping; repair or replace instrumentation as necessary to ensure reliable plant operations for EU008; changes to the scrubbing system arrangement; the addition of a new polishing screen; additional Mode of operation to add sulfuric acid and zinc oxide/sulfate to the process. The proposed work will be conducted at the Suwannee River/Swift Creek Complex, which is a phosphate mining and chemical production facility (Standard Industrial Classification No. 2874). The facility is located in Hamilton County at 15843 SE 78th Street, White Springs, Florida. UTM Coordinates are: Zone 17, 328.3 km East and 3368.8 km North; and, Latitude: 30° 26' 27" North and Longitude: 82° 47' 16" West.

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.

Executed in Jacksonville, Florida

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Michelle Neeley
Program Manager
Environmental Permitting

MN/lm

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this Written Notice of Intent to Issue Air Permit (including the Public Notice, the Technical Evaluation and Preliminary Determination, and the draft permit) and all copies were sent on the filing date below to the following listed persons:

William M. Ponton, General Manager - White Springs Agricultural Chemicals, Inc. dba PCS Phosphate, White Springs, (william.ponton@nutrien.com)
David Still, Manager Environmental Affairs - White Springs Agricultural Chemicals, Inc. dba PCS Phosphate, White Springs, (DAStill@potashcorp.com)
Veronica Sgro, P. E. – Koogler and Associates, Inc., (vsgro@kooglerassociates.com)
Christopher Kirts – Department of Environmental Protection, Compliance Assurance Section (Christopher.Kirts@dep.state.fl.us)

FILING AND ACKNOWLEDGMENT
FILED, on this date, pursuant to Section 120.52, F. S., with the designated Department Clerk, receipt of which is hereby acknowledged.

Leslie Maybin — May 7, 2018
Clerk — Date

FACILITY DESCRIPTION

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

The existing facility consists of the following emissions units.

E.U. ID No.	Brief Description
004	"X"-Train (Monocal/Dical process)
008	"Y" Train-#1 MAP/DAP Plant
010	#1 Storage and Shipping Building
015	Granular Product Shipping and Screening Facility
020	"B" Phosphoric Acid Plant
032	"Z"-Train #2 MAP/ DAP
034	South Phosphoric Acid Filter
035	North Phosphoric Acid Filter
036	"B" Superphosphoric Acid Plant
039	"C" Auxiliary Boiler
040	"D" Auxiliary Boiler
054	Molten Sulfur System
061	Green Superphosphoric Plant
066	"E" Sulfuric Acid Plant
067	"F" Sulfuric Acid Plant
068	"E" Auxiliary Boiler
069	"D" Phosphoric Acid Plant
070	"C" and "D" Superphosphoric Acid Plants
071	Acid Clarification Plant
072	Molten Sulfur System for "E" & "F" Sulfuric Acid Plants
075	Relocatable Concrete Batch Plant
076	15 Emergency Engines
077	Emergency Rental Boiler
080	(Two) 4.25 MMBtu/hr. Boilers
081, 082	Gypsum Dewatering Stack, and Cooling Ponds

PROPOSED PROJECT

Air construction permit to authorize:

- Additional Mode of operation to produce MAP/DAP product with added micronutrients to the process.
- Additional Mode of operation to produce MAP/DAP product with the addition of sulfuric acid and zinc oxide/sulfate.
- Repair or replace instrumentation as necessary to ensure reliable plant operations for EU008 "Y" Train (#1 MAP/DAP Plant) after being reactivated. Operations were previously suspended in August 2014.
- Replace the existing pre-neutralizer with a new same capacity one.
- Changes to the scrubbing system arrangement: The facility will continue using the recirculated pond

water in the existing secondary scrubbers (reaction cooler scrubber and abatement scrubber), with the addition of fresh well water going to the existing primary scrubbers (reaction, dryer and dust scrubbers). Only the secondary scrubbers using recirculated water from the Granulation Pond may be considered pollution control equipment. In accordance with 40 CFR 63, Subpart BB (HF MACT) requirements, the scrubber liquid flow and pressure drop shall be monitored continuously on the secondary scrubbers, if the pressure drop is greater than 5" of water column. If the pressure drop is less than 5" of water column, monitor liquid flow and determine Gmax. These scrubbers are venturi scrubbers followed by cyclonic separators. The pressure drop across these scrubbing systems may be greater than or less than 5 inches of water column.

- Add new polishing screen with three material transfer points that will be ducted to the existing air system.
- Fertilizer product from the "Y" Train (EU008) will continue to be stored and shipped from Granular Product Shipping and Screening Facility (EU 015) and/or the #1 Storage and Shipping Building (EU 010), as currently permitted.
- The Zinc Handling System with a storage silo for EU032, authorized by Permit No. 0470004-104-AC, will also supply the zinc storage and handling arrangement for EU008, as needed.

This project will modify the following emissions units.

E.U. ID No.	Brief Description
008	"Y" Train-#1 MAP/DAP Plant
054	Molten Sulfur System
010	#1 Storage and Shipping Building
015	Granular Product Shipping and Screening Facility

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.
- The facility **does** operate units subject to the New Source Performance Standards (NSPS) of Title 40 Part 60 of the Code of Federal Regulations.

SECTION 2. ADMINISTRATIVE REQUIREMENTS (FINAL)

1. Permitting Authority: The permitting authority for this project is the Northeast District Office, Permitting Program, Florida Department of Environmental Protection (Department). The Northeast District Office's mailing address is 8800 Baymeadows Way West, Suite 100, Jacksonville, Florida 32256, (904) 256-1700. All documents related to applications for permits to operate an emissions unit shall be submitted to the Northeast District Office.

2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Northeast District Office (Compliance Assurance) at: 8800 Baymeadows Way West, Suite 100, Jacksonville, Florida 32256, (904) 256-1700.

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 60, Subpart V—Standards of Performance for the Phosphate Fertilizer Industry: Diammonium Phosphate Plants); Appendix F (40 CFR 63, Subpart A General Provisions); and Appendix G (40 CFR 63, Subpart BB - National Emission Standards for Hazardous Air Pollutants from Phosphate Fertilizers Production Plants)

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.]

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 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(3) & (4), 62-4.080 & 62-210.300(1), F.A.C.]

8. 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.]

9. Application for Title V Permit: This permit authorizes construction of the permitted emissions units and initial operation to determine compliance with Department rules. A Title V air operation permit is required for regular operation of the permitted emissions unit. 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. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the appropriate Permitting Authority with copies to the Compliance Authority. [Rules 62-4.030, 62-4.050 and Chapter 62-213, F.A.C.]

10. 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 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 for EU008 "Y"-Train – No. 1 MAP/DAP Plant:

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

{Permitting Note: Baseline emissions of Fluoride and PM were determined to be 1.6 TPY and 16.8 TPY respectively. The could have accommodated/demand growth emissions of Fluoride and PM were determined to be 1.2 TPY and 40.4 TPY respectively.}

[Application 0470002-119-AC; and Rules 62-212.300(1)(e) and 62-210.370, F.A.C.]

This section of the permit addresses the following emissions unit.

E.U. ID No.	Brief Description
008	"Y"-Train No. 1 MAP/DAP Plant.

Stack height: 120'

The "Y" Train DAP/MAP Plant is permitted for input rate of 36.33 TPH of P_2O_5 feed (daily average) and 290,112 TPY of P_2O_5 input basis, 12-month rolling total. The plant is capable of producing fertilizer by seven different modes (Mode 1: DAP by Split Flows of 30% & 50% P_2O_5 phosphoric acid; Mode 2: DAP by 40% P_2O_5 acid; Mode 4: MAP by Split Flows of 30% & 50% P_2O_5 acid; Mode 5: MAP by 40% P_2O_5 acid; Mode 6: MAP by reacting ammonia and acid in two pipe reactors. The plant consists of the two separate pipe reactors (Mode 6), a tank reactor for the other modes, two pug mills, dryer, cooler, screens, mills, and other associated process equipment. Particulate matter, fluoride, and sulfur dioxide emissions are controlled by cyclones, venturi and cyclonic scrubbers. Emissions from the pipe reactors are vented to the reactor scrubber for ammonia removal and then to a scrubber for fluoride control. The permittee conducted testing on the pond water scrubbers for CAM applicability. CAM does not apply for this emissions unit. Fluoride emissions are covered by the 40 CFR 63 Subpart BB and testing was done by the permittee to show the pond water scrubbers are not designed for PM control.

{Permitting note(s): These emissions units are regulated under NSPS - 40 CFR 60, Subpart V, Standards of Performance for the Phosphate Fertilizer Industry: Diammonium Phosphate Plants, adopted and incorporated by reference in Rule 62-204.800(8)(b)30., F.A.C.; Rule 62-212.300, F.A.C., General Preconstruction Review Requirements; 62-212.400, F.A.C., Prevention of Significant Deterioration; Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards; and Rule 62-296.403, F.A.C., Phosphate Processing; 40 CFR 63, Subpart A - General Provisions; 40 CFR 63, Subpart BB - National Emission Standards for Hazardous Air Pollutants From Phosphate Fertilizers Production Plants. The inclusion of project 0470002-050-AC makes EU 008 subject to 40 CFR 60 Subpart V for DAP production. **The Part 40 CFR 63 Subparts A and BB take precedence; however, these units are subject to all applicable State Implementation Plan (SIP) rules if these units are out of compliance with the NESHAP**}.

EQUIPMENT

1. Relation to Other Permits: The conditions of this permit supplements all other previously issued air construction and operation permits for these emissions units. These conditions are in addition to all other applicable permit conditions and regulatory requirements. The Permittee shall continue to comply with the conditions of those permits, which include restrictions and standards regarding capacities, production, operation, fuels, emissions, monitoring, recordkeeping, reporting, and the like.

   [Rules 62-4.210, 62-4.030, and 62-210.300(1)(b), F.A.C.]

2. EU008 "Y"-Train No. 1 MAP/DAP Plant: This construction permit allows the facility to construct:

   - New Mode for the addition of micronutrients, including pumps, piping, conveyors and any associated equipment.
   - New Mode of operation for the addition of sulfuric acid and zinc oxide/sulfate using a proprietary enclosed process, including pumps, piping, acid tank and a mixing tank. The sulfur will be introduced in liquid or solid form supplied by existing Molten Sulfur System EU054. The unregulated Zinc Handling System with a storage silo, authorized by Permit No. 0470004-104-AC, will supply the zinc storage and handling arrangement for EU008, as needed.

- Changes to the scrubbing system arrangement: The facility will continue using the recirculated pond water in the existing secondary scrubbers (reaction cooler scrubber and abatement scrubber), with the addition of fresh well water going to the existing primary scrubbers (reaction, dryer and dust scrubbers). Only the secondary scrubbers using recirculated water from the Granulation Pond may be considered pollution control equipment. In accordance with 40 CFR 63, Subpart BB (HF MACT) requirements, the scrubber liquid flow and pressure drop shall be monitored continuously on the secondary scrubbers, if the pressure drop is greater than 5" of water column. If the pressure drop is less than 5" of water column, monitor liquid flow and determine Gmax. These scrubbers are venturi scrubbers followed by cyclonic separators. The pressure drop across these scrubbing systems may be greater than or less than 5 inches of water column.
- Replace the existing pre-neutralizer with a new same capacity one; small motors; conveyors; seal pots; tank agitators; pipes; flow meters; some instrumentation; and control valves.
- Repair as needed: To pump; day tanks; fans; elevators; drag flight; dryer; instrumentation; and control valves.
- Add a new polishing screen with three material transfer points that will be ducted to the existing air system.

The construction shall be in accordance with the application and associated documents provided to the Permitting Authority for the issuance of this permit. Any changes to the project that are contrary to these documents and permit shall be reported in writing to the Permitting Authority by the P.E. of Record.

[Application No. 0470002-119-AC]

PERFORMANCE RESTRICTIONS

3. Permitted Capacity: This permitting action does not authorize any changes to this current permitted capacity. The P_2O_5 feed shall not exceed 36.33 tons per hour (daily average) and 290,112 TPY of P_2O_5 input basis, 12-month rolling total. Solid or liquid sulfuric acid and zinc oxide/sulfate, and micronutrients will be added to the process but this will not be a significant change (<2% zinc) in the product. The rest of the process will remain unchanged.

   [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. 0470002-034-AC; Construction Permit No. 0470002-050-AC; 0470002-079-AC; Application No. 0470002-119-AC]

4. Hours of Operation: The hours of operation are not limited 8,760 hours/year (8784 in any Leap Year).

   [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

5. Methods of Operation are as follows: The facility is authorized to add two new Modes of operation to (EU008) Y Train - #1 MAP/DAP Plant for micronutrients and solid or liquid sulfuric acid and zinc oxide/sulfate. These new methods will be Mode 7 and Mode 8.

   Mode 1 - DAP (Diammonium Phosphate) produced by Split Acid (30% & 50% P_2O_5 INPUT) phosphoric acid.
   Mode 2 - DAP (Diammonium Phosphate) produced by 40% P_2O_5 INPUT phosphoric acid.
   Mode 4 - MAP (Monoammonium Phosphate) produced by Split Acid (30% & 50% P_2O_5 INPUT) phosphoric acid.
   Mode 5 - MAP (Monoammonium Phosphate) produced by 40% P_2O_5 INPUT phosphoric acid.
   Mode 6 – MAP produced by reacting ammonia and acid in two pipe reactors.
   Mode 7 - MAP/DAP with the addition of the micronutrients.

Mode 8 - MAP/DAP with the addition of solid or liquid sulfuric acid and zinc oxide/sulfate using a proprietary enclosed process.

Only one of the seven operating modes shall be in operation at one time.

[Rule 62-213.410, F.A.C.; Construction Permit No. 0470002-050-AC; and Application No. 0470002-119-AC]

6. Fertilizer Product Storage and Shipping: The fertilizer product from the "Y"-Train (EU 008) will continue to be stored at and shipped out from Granular Product Shipping and Screening Facility (EU 015) and/or the #1 Storage and Shipping Building (EU 010).

   [Application No. 0470002-119-AC]

7. Solid and Liquid Sulfur Content and Input Rate: The solid and liquid sulfur content of the product may vary from 1 to 30 percent sulfur by weight depending on customer requirements. The maximum input rate of sulfur to the process in either solid or liquid form shall not exceed 25 tons per hour and will be supplied by the existing (EU054) Molten Sulfur System. This permit does not authorize any changes to the maximum permitted capacity for EU054.

   [Application No. 0470002-119-AC]

EMISSIONS STANDARDS

8. Emissions Standards: This permit does not alter, change or establish any emissions standards for Total Fluoride, SO_2, VE, PM, Nitrogen oxides emissions (expressed as NO_2) that are stated in any of the existing, valid, Department permits for this emissions unit.

   {Permitting Note: The SO_2 limit only apply to Modes 1-2, 4-5}

   [Application No. 0470002-119-AC]

TESTING REQUIREMENTS

9. Initial Compliance Tests for Fluoride: The emissions unit shall be tested to demonstrate initial compliance with the emissions standards for fluoride. The initial tests shall be conducted within 60 days after achieving permitted capacity as modified, but not later than 180 days after initial operation of the unit.

   [Rules 62-4.070(3); 62-297.310(8)(b)1, F.A.C. and Application No. 0470002-119-AC]

10. Annual Compliance Tests for Fluoride: During each calendar year (January 1st to December 31st), the emissions unit shall be tested to demonstrate compliance with the emissions standards for fluoride.

    [Rule 62-297.310(8)(a)1, F.A.C.]

11. 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.]

12. Test Method for Total Fluorides: The Permittee shall determine compliance with the applicable total fluorides standards in 40 CFR 63.622 **Specific Condition No. 8.** as follows:

(1) Compute the emission rate (E) of total fluorides for each run using Equation BB-1:

$$E = \left(\sum_{i=1}^{N} C_i Q_i \right) / (PK) \qquad \text{(Eq. BB-1)}$$

Where:

E = Emission rate of total fluorides, gram/metric ton (pound/ton) of equivalent P_2O_5 feed.

Ci = Concentration of total fluorides from emission point "i," milligram/dry standard cubic meter (milligram/dry standard cubic feet).

Qi = Volumetric flow rate of effluent gas from emission point "i," dry standard cubic meter/hour (dry standard cubic feet/hour).

N = Number of emission points associated with the affected facility.

P = Equivalent P_2O_5 feed rate, metric ton/hour (ton/hour).

K = Conversion factor, 1000 milligram/gram (453,600 milligram/pound) (40 CFR 63.626(f)(1).

K = conversion factor, 1000 mg/g (7,000 gr/lb) (40 CFR 60.224(b)(1).

(2) The Permittee must use Method 13A or 13B (40 CFR part 60, appendix A) to determine the total fluorides concentration (C_i) and the volumetric flow rate (Q_i) of the effluent gas at each emission point. The sampling time for each run at each emission point must be at least 60 minutes. The sampling volume for each run at each emission point must be at least 0.85 dscm (30 dscf). If Method 13B is used, the fusion of the filtered material described in Section 7.3.1.2 and the distillation of suitable aliquots of containers 1 and 2, described in section 7.3.3 and 7.3.4 in Method 13 A, may be omitted.

(3) Compute the equivalent P_2O_5 feed rate (P) using Equation BB-2:

$$P = M_p R_p \qquad \text{(Eq. BB-2)}$$

Where:

P = P_2O_5 feed rate, metric ton/hour (ton/hour).

M_p = Total mass flow rate of phosphorus-bearing feed, metric ton/hour (ton/hour).

R_p = P_2O_5 content, decimal fraction.

(i) Determine the mass flow rate (M_p) of the phosphorus-bearing feed using the measurement system described in 40 CFR 60.223(a) and 40 CFR 63.625(a).

(ii) Determine the P_2O_5 content (R_p) of the feed using, as appropriate, the following methods specified in the Book of Methods Used and Adopted by The Association of Florida Phosphate Chemists (incorporated by reference, see 40 CFR 63.14) where applicable:

(A) Section IX, Methods of Analysis for Phosphate Rock, No. 1 Preparation of Sample.

(B) Section IX, Methods of Analysis for Phosphate Rock, No. 3 Phosphorus-P_2O_5 or $Ca_3(PO_4)_2$, Method A—Volumetric Method.

(C) Section IX, Methods of Analysis for Phosphate Rock, No. 3 Phosphorus-P_2O_5 or $Ca_3(PO_4)_2$, Method B—Gravimetric Quimociac Method.

(D) Section IX, Methods of Analysis for Phosphate Rock, No. 3 Phosphorus-P_2O_5 or Ca3$(PO_4)_2$, Method C—Spectrophotometric Method.

(E) Section XI, Methods of Analysis for Phosphoric Acid, Superphosphate, Triple superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus-P_2O_5, Method A—Volumetric Method.

(F) Section XI, Methods of Analysis for Phosphoric Acid, Superphosphate, Triple Superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus-P_2O_5, Method B—Gravimetric Quimociac Method.

(G) Section XI, Methods of Analysis for Phosphoric Acid, Superphosphate, Triple Superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus-P_2O_5, Method C—Spectrophotometric Method.

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.; Appendix A of 40 CFR 60; 40 CFR 60.224(b)(1) – (2); 40 CFR 63.626(f); and Rule 62-296.403(3), F.A.C.]

RECORDS AND REPORTS

13. 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 the feed rates of sulfuric acid and zinc oxide/sulfate.

    [Rule 62-297.310(10), F.A.C.]

14. Operational Records: The permittee shall maintain in an operational log the following records in either a written or electronic format: the date, time, duration of MAP/DAP production with and without micronutrients, a totalized quantity on an annual basis of (zinc oxide/sulfate) input to the acid tank of this emissions unit; the percent sulfuric acid used and the feed rate of micronutrients while operating in Mode 7, and the feed rate of sulfuric acid and zinc oxide/sulfate while operating in Mode 8. These records are to be reported upon request of the Department.

    [Rule 62-4.070, F.A.C.; Application No. 0470002-119-AC]

15. This permit does not alter, or change any recordkeeping or reporting requirements that are currently stated in any of the existing, valid, Department permits for this emissions unit.

16. Commencement of Construction and Operation: The permittee shall submit to the Air Compliance Authority of this Office written notification of both the date of commencement of construction and commencement of operation of the scrubber changes; repairs or replacement of equipment; new pre-neutralizer; additional sulfuric acid and zinc oxide/sulfate and micronutrients to the process. These notifications shall be submitted to Mr. Christopher Kirts at Christopher.kirts@dep.state.fl.us, within as many days prior to the date of construction as practical, but no later than fifteen (15) business day following commencement of construction and operation.

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

The following permit conditions are revised as indicated. ~~Strikethrough~~ is used to denote the deletion of text. Double-underlines are used to denote the addition of text. All changes are emphasized with yellow highlight.

Permit Being Modified: Permit No. 0470002-112-AV

17. Modification to the emissions unit description for EU054 Molten Sulfur System for "C" & "D" Sulfuric Acid Plants:

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

E.U. ID No.	Brief Description
054	Molten Sulfur System for "C" & "D" Sulfuric Acid Plants

Molten Sulfur System for "C" & "D" Sulfuric Acid Plants consist of a rail & truck unloading system with transfer point venting, receiving pit, supply pit, and storage tank. This EU will also supply sulfur in solid or liquid form to EUs 008 "Y" Train-#1 MAP/DAP Plant and 032 "Z" Train-#2 MAP/DAP Plant. The EU has an emission limitation for visible emissions. CAM does not apply.