FLORIDA DEPARTMENT OF
Environmental Protection

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2600 Blair Stone Road
Tallahassee, Florida 32399-2400

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Governor

Carlos Lopez-Cantera
Lt. Governor

Noah Valenstein
Secretary

PERMITTEE

Suwannee River/Swift Creek Complex
White Springs Agricultural Chemicals, Inc.
dba PCS Phosphate, White Springs
P. O. Box 300
White Springs, Florida 32096

Authorized Representative:
William Ponton, General Manager

Permit No. 0470002-122-AC
Permit Expires: December 31, 2021
Suwannee River/Swift Creek Complex
Production Increases
Sulfuric Acid Plants (SAPs) E and F
Hamilton County

PROJECT

This is the final air construction permit that authorizes production increases for Sulfuric Acid Plants (SAPs) E and F at the Suwannee River/Swift Creek Complex (SRSCC). The increase will be from the currently permit limit for each SAP of 2,500 tons per day (TPD) of 100% sulfuric acid to 2,750 TPD. The SRSCC is an existing phosphate fertilizer manufacturer categorized under Standard Industrial Classification Number (No.) 2874. This existing facility is in Hamilton county at 15843 SE 78th Street, White Springs, Florida. The UTM Coordinates are: Zone 17, 328.3 kilometers (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 CF 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.). 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 requirements for major new source review in Chapter 62-212, F.A.C.

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 Tallahassee, Florida

David Lyle Read, P.E.

David Lyle Read, P.E.
2018.12.21 08:57:44 -05'00'

For:
Syed Arif, P.E., Program Administrator
Office of Permitting and Compliance
Division of Air Resource Management

SA/dlr

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this final air permit package (including the Final Determination and Final Permit with 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 following persons.

William Ponton, General Manager- PCS Phosphate - White Springs: William.Ponton@nutrien.com
Christopher Smith - PCS Phosphate - White Springs: Christopher.D.Smith@nutrien.com
Pradeep Raval, Koogler and Associates: praval@kooglerassociates.com
Veronica N. Sgro, P.E. -Koogler and Associates: vrsgo@kooglerassociates.com
EPA Region 4 NSR/PSD: NSRsubmittals@epa.gov
Stuart Bartlett, Northeast District: Stuart.Bartlett@dep.state.fl.us
Ms. Lynn Scearce, DEP OPC: lynn.scearce@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.

Elizabeth Walker

Digitally signed by Elizabeth Walker
Date: 2018.12.21 09:35:16 -05'00'

FACILITY DESCRIPTION

This existing facility processes phosphate rock to produce several products at the SRSCC. The SRSCC 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 (SAP) plants, two phosphoric acid filters, three superphosphoric acid plants, one green superphosphoric plant, and one acid clarification plant. The SRSCC also has storage silos associated with the Swift Creek Mine. The emission units affected by this permitting action is highlighted in yellow.

LIST OF EMISSION UNITS.

Sub-section	E.U. ID No.	Brief Description
A.	004	"X"-Train (Monocal/Dical process)
B.	008	"Y" Train-#1 MAP/DAP Plant
C.	010	#1 Storage and Shipping Building
D.	015	Granular Product Shipping and Screening Facility
E.	020	"B" Phosphoric Acid Plant
F.	032	"Z"-Train #2 MAP/DAP Plant
G.	034	South Phosphoric Acid Filters
H.	035	North Phosphoric Acid Filters
I.	036	"B" Superphosphoric Acid Plant
J.	039	"C" Auxiliary Boiler
K.	040	"D" Auxiliary Boiler
L.	054	Molten Sulfur System
M.	061	Green Superphosphoric Acid Plant
N.	066	"E" Sulfuric Acid Plant
O.	067	"F" Sulfuric Acid Plant
P.	069	"D" Phosphoric Acid Plant
Q..	070	"C" and "D" Superphosphoric Acid Plants
R.	071	Acid Clarification Plant
S.	072	Molten Sulfur System
T.	075	Relocatable Concrete Batch Plant (2) 4.25 MMBtu/hr Boilers
U.	076	13 Emergency Engines
V.	077	Emergency Rental Boiler
W X. Y Z	079 080 081, 082 83	Natural Gas 230 MMBtu/ hour Auxiliary Boiler (Two) 4.25 MMBtu/hr Boilers Gypsum Dewatering Stack, and Cooling Ponds 50 MMBtu/hour Boiler

PROPOSED PROJECT

This project authorizes a production rate increase from 2,500 TPD of 100 percent sulfuric acid per SAP to 2,750 TPD for SAPs E and F at the SRSCC. This production increase will occur with the SAPs still meeting the lower sulfur dioxide (SO_2) limits imposed by Permit No. 0470002-107-AC. Accomplishing the production increase may require changes to some piping, pumps, instrumentation and heat exchangers along with other work for SAPs E and F. The proposed project will also result in an increase in air emissions from the existing molten sulfur system (EU 072) given the expected increase in sulfur throughput. The proposed project is not expected to require any equipment changes in the existing molten sulfur system.

The production increase will occur in two phases. In Phase 1, a 250 TPD increase in production for SAP F will be authorized beginning when the permit for this project becomes final. In Phase 2, a 250 TPD increase in production for SAP E, to go along with the production increase for SAP E, be will authorized beginning with a start date of January 1, 2020. All emission increases, as described in the Technical Evaluation document, associated with the project are below significant levels. Consequently, a review under the Prevention of Significant Deterioration (PSD) program in Rule 62-212.400 of the Florida Administrative Code was not required.

FACILITY REGULATORY CLASSIFICATION

- The existing facility is a major source of HAP.
- The existing facility is a Title V major source of air pollution in accordance with Chapter 62-213, F.A.C.
- The existing facility is a major stationary source in accordance with Rule 62-212.400 (PSD), F.A.C.
- This facility does not operate units subject to the acid rain provisions of the Clean Air Act (CAA)
- The facility operates units that are subject to the New Source Performance Standards (NSPS) at 40 Code of Federal Regulations, Part 60 (40 CFR 60), and the National Emissions Standards for Hazardous Air Pollutants (NESHAP) at 40 CFR 63.

SECTION 2. ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: The permitting authority for this project is the Office of Permitting and Compliance, Division of Air Resource Management, Florida Department of Environmental Protection (Department). The mailing address for the Office of Permitting and Compliance is 2600 Blair Stone Road (MS #5505), Tallahassee, Florida 32399-2400.

2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Compliance Authority, the Department's Southwest District (SWD). The Compliance Authority's mailing address is:

   Florida Department of Environmental Protection
   Northeast District Office
   Compliance Assurance
   8800 Baymeadows Way West, Suite 100
   Jacksonville, Florida 32256
   Telephone: 904/256-1700
   Fax: 904/256-1590

3. Appendices: The following Appendices are attached as a part of this permit and the permittee must comply with the requirements of the appendices:
   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.]

6. Modifications: No emissions unit shall be constructed or 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. Title V Permit: This permit authorizes specific modifications and new construction on the affected emissions units as well as initial operation to determine compliance with conditions of this permit. Title V operation permits are required for regular operation of the permitted emissions units. The permittees shall apply for Title V operation permits at least 90 days prior to expiration of this permit, but no later than 180 days after completing the required work and commencing operation. To apply for a Title V operation permit, the applicants shall submit the appropriate application forms, 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 each Compliance Authority. [Rules 62-4.030, 62-4.050 and Chapter 62-213, F.A.C.]

   {Permitting Note: Production increase authorized by this permit will be completed in two phases. The production increase for SAP F with be authorized when this permit become final. When the production increase for SAP E comes into effect on January 1, 2020, the permittee shall apply for a Title V revision per the requirements of ***Specific Condition 9****.}*

10. Objectionable Odors Prohibited: No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor. [Rule 62-296.320(2), F.A.C.]

    {Permitting Note: An objectionable odor is defined in Rule 62-210.200(Definitions), F.A.C., as any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance.}

11. Unconfined Emissions of Particulate Matter: No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity, including vehicular movement; transportation of materials; construction, alteration, demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions. Any permit issued to a facility with emissions of unconfined particulate matter shall specify the reasonable precautions to be taken by that facility to control the emissions of unconfined particulate matter. General reasonable precautions include the following: a. Paving and maintenance of roads, parking areas and yards; b. Application of water or chemicals to control emissions from such activities as demolition of buildings, grading roads, construction, and land clearing; c. Application of asphalt, water, oil, chemicals or other dust suppressants to unpaved roads, yards, open stock piles and similar activities; d. Removal of particulate matter from roads and other paved areas under the control of the owner or operator of the facility to prevent re-entrainment, and from buildings or work areas to prevent particulates from becoming airborne; e. Landscaping or planting of vegetation; f. Use of hoods, fans, filters, and similar equipment to contain, capture and/or vent particulate matter; g. Confining abrasive blasting where possible; and h. Enclosure or covering of conveyor systems.
    [Rule 62-296.320(4)(c), F.A.C.]

EMISSION REPORTING

12. 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 10 years following resumption

of regular operations after the change. **For this project, the reporting shall begin starting January 1, 2020, when the production increase for SAP E (EU 066) comes into effect**. 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 10-year period setting out the unit's annual emissions during the calendar year that preceded submission of the report. The report shall contain the following:

(1) The name, address and telephone number of the owner or operator of the major stationary source;

(2) The annual emissions calculations pursuant to the provisions of 62-210.370, F.A.C., which are provided in Appendix 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 SO_2 emissions for the SAP E (EU 066) and SAP F (EU 067):

(1) The permittee shall use data collected from the CEMS to determine and report the actual annual emissions of SO_2.

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

{Permitting Note: Baseline emissions of SO_2 from both phases of the project combined (SAPs E and F production increases) was 1,630.8 TPY. The could have accommodated/demand growth emissions of SO_2 from both phases of the project combined (SAPs E and F production increases) was 327.9 TPY.}

[Application 0470002-122-AC; and Rules 62-212.300(1)(e) and 62-210.370, F.A.C.]

SAPs E and F (EUs 066 and 067)

This subsection of the permit addresses the following emission units:

EU No.	Brief Description
066	"E" Sulfuric Acid Plant
067	"F" Sulfuric Acid Plant

Sulfuric Acid Plants E and F utilize a double absorption process that produces sulfuric acid and controls sulfur dioxide (SO_2) emissions. Both emissions units use a Brinks mist eliminator to control sulfuric acid mist (SAM).

{Permitting Note: This emissions unit is regulated under NSPS - 40 CFR 60, Subpart H, Standards of Performance for Sulfuric Acid, adopted and incorporated by reference in Rule 62-204.800(8)(b)12., F.A.C.; Rule 62-212.300, F.A.C., General Preconstruction Review Requirements; Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD): Permit No. PSD-FL-082; and Rule 296.402, F.A.C., Sulfuric Acid Plants.}

AUTHORIZED PHYSICAL CHANGES

1. SAPs E and F: Changes to piping, pumps, instrumentation and heat exchangers along with other work for SAPs E and F are authorized to allow for the production increase authorized by **Specific Condition 2** of this subsection.

   [Application No. 0470002-122-AC]

SULFURIC ACID PRODUCTION INCREASE, SAPS E AND F

2. Production Increase and Schedule: The production increase schedule and amounts for SAP E and SAP F are authorized in conformance with the requirements given below:

   a. *SAP E*. Production increase from 2,500 TPD of 100% sulfuric acid to 2,750 TPD is authorized, and the SO_2 emission limits in **Condition 3** of this subsection shall apply, after the plant production rate exceeds 2,500 TPD, but the limits in **Condition 3** shall apply regardless no later than January 1, 2020.

   b. *SAP F*. Production increase from 2,500 TPD of 100% sulfuric acid to 2,750 TPD is authorized upon issuance of final permit for this project.

   [Rule 62-210.200(PTE), F.A.C. and Application No. 0470002-122-AC]

SO_2 EMISSION LIMITS

3. SO_2 Emission Limits: The new SO_2 emission limits upon which this SAP production increases are based, along with the required compliance date for each SAP, are given below:

SAP	Emission Limit	CD Compliance Date
Phase 1 – SAP F	2.6 lb/ton, 3-hr rolling average [1], **effective**	January 1, 2018 **(enforce)**
Phase 1 – SAP F	2.3 lb/ton, 365 day rolling average [2], **effective**	January 1, 2018 **(enforce)**
Phase 2 – SAP E	2.6 lb/ton, 3-hr rolling average [1]	January 1, 2020 or upon production exceeding 2,500 TPD, whichever is earlier
Phase 2 – SAP E	2.3 lb/ton, 365 day rolling average [2]	January 1, 2020 or upon production exceeding 2,500 TPD, whichever is earlier

1. Not including startup and shutdown periods.
2. Including startup and shutdown periods.

[Permit No. 0470002-107-AC]

SO_2 EMISSION REPORTING

4. PSD Avoidance – SO_2 Emission Reporting: The permittee shall follow the SO_2 emission reporting requirements for SAPs E and F given in **Specific Condition 12** of Section 2 of this permit. [Rules 62-212.300(1)(e) and 62-210.370, F.A.C. and Application No. 0470002-122-AC]

NOTIFICATIONS

5. Work Status: For each SAP, the permittee shall notify the Compliance Authority within 5 business days of utilizing the production increase authorized by this permit. [Rules 62-4.070(1) and (3) and 62-4.080, F.A.C.; and Application No. 0470002-122-AC]