

Appendix A-3 Nutrien White Springs Agricultural Chemicals



FLORIDA DEPARTMENT OF Environmental Protection

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FPERMITTEE

White Springs Agricultural Chemicals, Inc.
15843 Southeast 78th Street
White Springs, Florida 32096

Authorized Representative:
Jeffrey Joyce, General Manager

Air Permit No. 0470002-132-AC
Permit Expires: December 31, 2022

Minor Air Construction Permit
Suwannee River and Swift Creek Complex
SO₂ Cap SAP E and F

PROJECT

This is the final air construction permit, which establishes a pound per hour (lb/hr) sulfur dioxide (SO₂) emission cap on Sulfuric Acid Plant (SAP) E and F at the White Springs Agricultural Chemicals, Inc. Suwannee River and Swift Creek Complex. The Suwannee River and Swift Creek Complex is an existing phosphate fertilizer production facility categorized under Standard Industrial Classification No. 2874. The existing facility is in Hamilton County at 15843 Southeast 78th Street in White Springs, Florida. The UTM coordinates are Zone 17, 328.3 kilometers (km) East and 3,368.8 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. As noted in the Final Determination provided with this final permit, only minor changes and clarifications were made to the draft 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 Tallahassee, Florida

A handwritten signature in black ink that reads "David Lyle Read". The signature is stylized with a large, sweeping "D" and a cursive "Read".

Digitally signed by David Lyle Read
Date: 2022.09.22 13:28:50 -04'00'

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

FINAL PERMIT

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Final Air Construction 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.

Mr. Jeffrey Joyce, White Springs Agricultural: jeffrey.joyce@nutrien.com

Mr. Keith Knelle, White Springs Agricultural: keith.knelle@nutrien.com

Mr. Stan Posey, White Springs Agricultural: Stan.Posey@nutrien.com

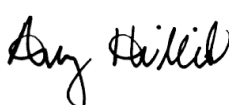
Ms. Veronica N. Sgro, P.E., Koogler and Associates, Inc.: svsgro@kooglerassociates.com

DEP Northeast District Office: DEP_NED@dep.state.fl.us

Ms. Amy Hilliard, DEP PRS: Amy.Hilliard@FloridaDEP.gov

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.



Digitally signed by Amy
Hilliard
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SECTION 1. GENERAL INFORMATION

FACILITY DESCRIPTION

The Suwannee River and Swift Creek Complex (SRSCC) processes phosphate rock to produce several products. 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 (EU).

EU 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	13 Emergency Engines
077	Emergency Rental Boiler
079	Natural Gas 230 MMBtu/hour Auxiliary Boiler
080	Two 4.25 MMBtu/hour Boilers
081 & 082	Gypsum Dewatering Stack and Cooling Ponds
083	50 MMBtu/hour Boiler for Micronutrient Process

PROPOSED PROJECT

The proposed project will impose a sulfur dioxide (SO₂) emission cap on Sulfuric Acid Plant (SAP) E and F at the Suwannee River and Swift Creek Complex.

This project will affect the following emissions units.

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

SECTION 1. GENERAL INFORMATION

- 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 operates units subject to the New Source Performance Standards (NSPS) of Title 40 Part 60 of the Code of Federal Regulations (40 CFR 60).
- The facility operates units subject to the National Emissions Standards of Hazardous Air Pollutants (NESHAP) of 40 CFR 63.

SECTION 2. ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: The permitting authority for this project is the Permit Review Section in the Division of Air Resource Management of the Department of Environmental Protection (Department). The Permit Review Section mailing address 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 Department's Northeast District Office at: 8800 Baymeadows Way W, Jacksonville, Florida 32256.
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); and 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: 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.]
[Rule 62-212.400(12), F.A.C.]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. SAP Nos. 10 and 11 (EU 004 and 005)

This section of the permit addresses the following emissions units.

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

The "E" Sulfuric Acid Plant utilizes the double absorption process to produce sulfuric acid and to control sulfur dioxide (SO₂) emissions. This emissions unit uses Brinks mist eliminators to control sulfuric acid mist (SAM) emissions. The Drying Tower is an all-alloy tower, and this unit has a single Heat Exchanger (as per the changes in Permit No. 0470002-065-AC). The plant is a 2750 tons per day of sulfuric acid plant (100% H₂SO₄ basis).

The "F" Sulfuric Acid Plant utilizes the double absorption process to produce sulfuric acid and to control sulfur dioxide (SO₂) emissions. This emissions unit uses Brinks mist eliminators to control sulfuric acid mist (SAM) emissions. The plant is a 2750 tons per day of sulfuric acid plant (100% H₂SO₄ basis).

{Permitting Notes: Both these emissions units are regulated under: NSPS 40 CFR 60, Subpart H, Standards of Performance for Sulfuric Acid Plants, adopted and incorporated by reference in Rule 62-204.800(8)(b), F.A.C.; Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD) [PSD-FL-082]; Rule 296.402, F.A.C., Sulfuric Acid Plants; and, the Federal U.S. EPA Consent Decree, No. 14-707-BAJ-SCR entered between White Springs Agricultural Chemicals, Inc. and the U.S. Environmental Protection Agency (U.S. EPA).}

PREVIOUS APPLICABLE REQUIREMENTS

1. Effect on Other Permits: The conditions of this permit supplement all previously issued air construction and operation permits for these emissions units. Unless otherwise specified, these conditions are in addition to all other applicable permit conditions and regulations. [Rule 62-4.070(1) & (3), *Reasonable Assurance*, F.A.C.]

PERMITTED CAPACITIES

2. Permitted Capacities: The permitted capacities of the SAPs shall remain the same. [Application No. 0470002-132-AC; and Rule 62-4.070(1) & (3), *Reasonable Assurance*, F.A.C.]

SO₂ EMISSION LIMIT

3. SO₂ Emission Limit: Effective January 1, 2023, the following SO₂ emission cap applies to the combined CEMs-measured emissions from SAP E and SAP F: 840 lb/hr on 24-hour block averaging period (6:00 a.m. to 6:00 a.m.). The 24-hour block average (6:00 a.m. to 6:00 a.m.) does not include hours when both SAPs are not operating.
[Rule 62-4.030, *General Prohibition*, F.A.C.; and, Rule 62-4.210, *Construction Permits*, F.A.C.; and Application No. 0470002-132-AC.]

COMPLIANCE REQUIREMENTS

4. Initial Compliance: These emission units shall use certified SO₂ CEMS data to demonstrate initial compliance with the SO₂ emission cap given in **Specific Condition 3** of this subsection. [Rules 62-4.070(1) & (3), *Reasonable Assurance*, F.A.C.; and Application No. 0470002-132-AC.]
5. Recordkeeping: The permittee shall keep records of the initial and ongoing compliance demonstrations. The records shall include the SO₂ CEMS data along with the sulfuric acid production rate (TPH, tons per hour). Any reports shall be prepared in accordance with the applicable requirements specified in Appendix D (Common Testing Requirements) of this permit. [Rule 62-297.310(10), F.A.C.; and Application No. 0470002-132-AC.]
6. Ongoing Compliance: The permittee shall use certified SO₂ CEMS data to demonstrate continuous compliance with the SO₂ emission cap given in **Specific Condition 3** of this subsection. [Rules 62-4.070(1) & (3), *Reasonable Assurance*, F.A.C.; and Application No. 0470002-132-AC.]