Title V Air Operation Permit Renewal
Permit No. 0470002-080-AV

APPLICANT

The applicant for this project is White Springs Agricultural Chemicals, Inc. The applicant's responsible official and mailing address are: Terry L. Baker, General Manager, White Springs Agricultural Chemicals, Inc.-Suwannee River/Swift Creek Complex, P. O. Box 300, White Springs, Florida 32096.

FACILITY DESCRIPTION

The applicant operates the Suwannee River/Swift Creek Complex, which is located at White Springs Agricultural Chemicals, Inc.

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

Also included in this permit are miscellaneous unregulated/insignificant emissions units and/or activities.

PROJECT DESCRIPTION

The purpose of this permit is to incorporate Air Construction Permit No. 0470002-079-AC, which authorizes the streamlining of recordkeeping for EUs 008 "Y" Train and EU032 "Z" Train to limit the capacity based on P_2O_5 input; to allow flexibility to operate with an ammonia vaporizer on EUs 008 and 032; to add a temporary, portable Ammoniated Polyphosphate Plant to manufacture liquid fertilizer to the Unregulated List; to allow the tail gas scrubber pressure drop for EU032 to be reported based on the entire scrubber; The facility will conduct a test to determine the feasibility of using re-circulating fresh water liquid stream to be cooled with non contact heat exchangers in lieu of the once through pond water currently used on the dryer cooler scrubbers in the MAP plants. If the feasibility test is successful, the facility will began construction to change the scrubber liquid in the EU032 "Z"-Train Reaction Cooler Scrubber, "Z"-Train Dryer Cooler Scrubber, "Z"-Train Dust Cooler Scrubber, EU008 "Y"-Train Reaction Cooler Scrubber, "Y"-Train Fluorine Abatement Scrubber from once-through pond water to re-circulating fresh water for EUs 008 and 032; the addition of heat exchanger(s) and water tanks for the indirect contact cooling of the re-circulating water. This DRAFT/PROPOSED permit will only reflect the affected Subsections D, J, and Common Conditions EE, FF, HH, II for EUs 008 and 032. The FINAL permit will be issued in its entirety.

PROCESSING SCHEDULE AND RELATED DOCUMENTS

Application for a Title V Air Operation Permit Revision received November1, 2012.
Additional Information Request dated November 20, 2012.
Additional Information Response received November 21 and 27, 2012.
Notice of Intent to Issue Air Permit issued December 19, 2012.
Public Notice Published January 17, 2013 in the Jasper News.

PRIMARY REGULATORY REQUIREMENTS

Title III: The facility is identified as a major source of hazardous air pollutants (HAP).

Title V: The facility is a Title V major source of air pollution in accordance with Chapter 62-213, Florida Administrative Code (F.A.C.).

PSD: The facility is a Prevention of Significant Deterioration (PSD)-major source of air pollution in accordance with Rule 62-212.400, F.A.C.

NSPS: The facility does operate units subject to the New Source Performance Standards (NSPS) of 40 Code of Federal Regulations (CFR) 60.

NESHAP: The facility does operate units subject to the National Emissions Standards for Hazardous Air Pollutants (NESHAP) of 40 CFR 63.

CAIR: The facility is/is not subject to the Clean Air Interstate Rule (CAIR) set forth in Rule 62-296.470, F.A.C.

CAM: Compliance Assurance Monitoring (CAM) applies to Units 003 and 038 are subject to CAM for the regulated emissions of particulate matter, SO2 and fluoride, which are each controlled by a Packed Scrubber.

PROJECT REVIEW

Brief description of any changes that were made as part of this revision (i.e. reformatting, replacement of TV-6 with new Appendix TV, streamlining of EU sections by moving common conditions to the new appendices, etc.). Numerically list a discussion of the reasons for the changes being made as part of this project, followed by the conditions(s) being changed. Show the changes in the condition with a ~~strikethrough format~~ for deletions and a double underline format for additions.

Subsection D-EU008 "Y" Train

D.1. Permitted Capacity.

~~a. The production rate for Modes 1-2 and 4-6 shall not exceed 60 tons of product per hour based on a 12-month rolling average (12-MRA Hourly Rate Maximum) or 66 tons of product per hour based on a one-hour daily rolling average.~~ The P_2O_5 feed shall not exceed 36.33 tons per hour (daily average). ~~12-MRA (MRA - Monthly Rolling Average) Hourly Rate Maximum shall not be exceeded by the 12-MRA hourly rate calculated by averaging each monthly hourly average with the previous 11 monthly hourly averages.~~ and 290,112 TPY of P_20_5 input basis.

~~b. The annual production rate for Mode 6 shall not exceed 525,600 tons of product per year.~~

[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; and 0470002-079-AC]

Subsection J- EU032 "Z" Train

J.1. Permitted Capacity. ~~The operation rate shall not exceed the Maximum 12-MRA Hourly Rate = 75 tons of product or Maximum Daily 1-Hour Average Rate = 83 tons of product.~~ The P_2O_5 feed shall not exceed 45.7 tons per hour daily average and 362,737 TPY P_2O_5 input.
~~(41.1 tons per hour 12-MRA)~~.

~~12-MRA (MRA - Monthly Rolling Average) Hourly Rate Maximum shall not be exceeded by the 12-MRA hourly rate calculated by averaging each monthly hourly average with the previous 11 monthly hourly averages.~~

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. 0470002-032-AC; Construction Permit No. 0470002-034-AC; and 0470002-079-AC]

J.12.a. Scrubber Pressure Drop. The Permittee shall install, calibrate, maintain, and operate a monitoring system which continuously measures and permanently records the pressure drop across each scrubber in the process scrubbing system in 15-minute block averages. The monitoring system shall be certified by the manufacturer to have an accuracy of ±5 percent over its operating range.
[Rule 62-204.800, F.A.C.; 40 CFR 60.223(c)]

J.12.b. The tail gas scrubber pressure drop shall be measured and reported based on the entire scrubber measurements and not separated by sections.
[Construction Permit No. 0470002-079-AC]

Appendix U- Unregulated Emissions List: Add a Temporary, portable Ammoniated Polyphosphate Plant to manufacture liquid fertilizer, and the Ammonia Vaporizer.

CONCLUSION

This project revises Title V air operation permit No. 0470002-077-AV, which was issued on July 30, 2012. This Title V air operation permit revision is issued under the provisions of Chapter 403, Florida Statues (F.S.), and Chapters 62-4, 62-210 and 62-213, F.A.C.