FACILITY AND PROJECT DESCRIPTION

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 dical process, two diammonium phosphate (DAP) plants, one monoammonium (MAP)/DAP storage building, one MAP/DAP screen/shipping building, four sulfuric acid plants, two phosphoric acid filters, four 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.

PROPOSED PROJECT

This permit authorizes proposed maintenance projects for the existing sulfuric acid plants EU066, EU022, EU021 and EU067. No emissions increases or plant production increases are allowed from this project. This project will modify the following emissions units in the order of the expected maintenance sequence.

Facility ID No. 0470002	
ID No.	**Emission Unit Description**
066	"E" Sulfuric Acid Plant
022	"D" Sulfuric Acid Plant
021	"C" Sulfuric Acid Plant
067	"F" Sulfuric Acid Plant

EU066 "E" sulfuric acid plant- replace (drying tower) & (center and north gas-to-gas heat exchanger);

EU022 "D" Sulfuric Acid Plant- replace (Interpass Tower) and (Primary Economizer);
EU021 "C" Sulfuric Acid Plant- replace (Final Tower), (Primary Economizer) and (No. 1 cooler); and
EU067 "F" Sulfuric Acid Plant- replace (Final Tower), (North & ~~South~~ **Center** Heat Exchangers), (Drying Acid Cooler) and (Waste Heat Boiler (heat exchanger))

No additional emissions points are added to these EUs.

FACILITY REGULATORY CLASSIFICATION

- The facility is a major source of hazardous air pollutants (HAP).
- The facility has no 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 213, F.A.C.
- The facility is a major stationary source in accordance with Rule 62-212.400(PSD), F.A.C.

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS (FINAL)

Subsection D of the permit addresses the following emissions unit.

ID No.	Emission Unit Description
067	"F" Sulfuric Acid Plant

"F" Sulfuric Acid Plant is a double absorption process that produces sulfuric acid and controls sulfur dioxide (SO_2) emissions. The emissions unit uses a Brinks mist eliminator to control sulfuric acid mist (SAM). CAM does not apply for sulfur dioxide for this emissions unit.

{Permitting note(s): 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(7)(b)10., 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); and Rule 296.402, F.A.C., Sulfuric Acid Plants.}

D.1. Relation to Other Permits. The conditions of this permit will supplement and comply with conditions of all existing, valid, Department permits.
[Rules 62-4.210, 62-4.030, and 62-210.300(1)(b), F.A.C.]

EQUIPMENT

D.2. Equipment Name. The permittee is authorized to replace the existing Final Tower (brick lined tower) with an all-alloy tower of equivalent capacity; to replace the two existing heat exchangers (North and ~~South~~ **Center** Heat Exchanger) with a single unit of similar capacity; replace the existing Drying Acid Cooler (heat exchanger) with a like-kind cooler; and replace the existing waste heat boiler (heat exchanger) with a like-kind Waster Heat Boiler.

[Application received on February 20, 2009]

PERFORMANCE RESTRICTIONS

D.3. Permitted Capacity. This permit does not change any or establish any new capacities for this EU. The production rate shall not exceed 2500 TPD, expressed as 100 percent H_2SO_4 or 104.20 TPH.

[Rule 62-210.200(PTE), F.A.C., and Construction Permit No. AC24-56209, PSD-FL-082]

D.4. Hours of Operation. The hours of operation of are not limited (8760 hours per year).

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

EMISSIONS STANDARDS

D.5. Emissions Standards. No emissions increases or plant production increases are allowed from this project.

D.6. Sulfur Dioxide. Sulfur Dioxide Emissions shall not exceed 2 kg per metric ton of acid produced (4 lb per ton), the production being expressed as 100 percent H_2SO_4, 416.67 lbs/hr and 1820.00 TPY.

[Rule 62-204.800(7)(b)10., F.A.C.; 40 CFR 60.82(a); Construction Permit No. AC24-56209, PSD-FL-082]