Florida Department of Environmental Protection

Southwest District Office
13051 North Telecom Parkway
Temple Terrace, Florida 33637-0926

Rick Scott
Governor

Jennifer Carroll
Lt. Governor

Herschel T. Vinyard Jr.
Secretary

DRAFT PERMIT

PERMITTEE

Mosaic Fertilizer, LLC
103830 Circa Crossing Drive
Lithia, Florida 33547

Authorized Representative:
Mr. Thomas W. Fuchs, Plant Manager

Air Permit No. 1050055-022-AC
Permit Expires: 07/01/2015
Site Name : South Pierce Plant
Minor Air Construction Permit
Project Name: Auxiliary Boiler Replacement

This is the final air construction permit, which authorizes the installation of an auxiliary boiler (E.U. ID 053) that will replace the existing auxiliary boiler (E.U. ID 001). The proposed work will be conducted at the Mosaic Fertilizer - South Pierce Plant (Standard Industrial Classification No. 2874). The facility is located in Polk County at 7450 Highway 630 in Mulberry, Florida. The UTM coordinates are Zone 17, 407.2 km East, and 3073.3 km North. As noted in the Final Determination provided with this final permit, no changes or only minor changes and clarifications were made to the draft permit.

This final permit is organized by the following sections:

Section 1. General Information

Section 2. Administrative Requirements and Facility-wide Specific Conditions

Section 3. Emissions Unit Specific Conditions

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.

This air pollution 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 Hillsborough County, Florida
DRAFT

_____ _____

Cindy Zhang-Torres, P.E. Effective Date
Air Permitting Manager
Southwest District

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Final Air Permit package (including the Final Determination, the Final Permit and the 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 _____ to the persons listed below.

Mr. Thomas W. Fuchs, Mosaic Fertilizer, LLC (Tom.Fuchs@mosaicco.com)
Mr. Rama Iyer, Mosaic Fertilizer (Rama.Iyer@mosaicco.com)

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.

DRAFT

_____ _____
(Clerk) (Date)

FACILITY AND PROJECT DESCRIPTION

Existing Facility

This facility is classified as a phosphate fertilizer production facility. This facility consists of two sulfuric acid plants, an auxiliary boiler, a molten sulfur storage and handling system, a phosphate rock storage bin, a phosphogypsum stack, and two emergency diesel engines.

This facility previously included two phosphoric acid plants, one dry ball mill grinding system, a granular triple superphosphate (GTSP) production plant, and the GTSP storage building. These systems were put into long term reserve shutdown on May 31, 2006 and were declared permanently shutdown in the permit renewal application dated November 29, 2010.

Facility ID No. 01050055	
ID No.	Emission Unit Description
001	Auxiliary Boiler
004	Sulfuric Acid Plant #10
005	Sulfuric Acid Plant #11
008	Phosphoric Acid Plant - A Train (Permanently Shutdown)
009	Phosphoric Acid Plant - B Train (Permanently Shutdown)
022	No. 2 Ball Mill Grinding System (Permanently Shutdown)
023	GTSP Production Plant (Permanently Shutdown)
024	GTSP East Storage Building - North Scrubber (Permanently Shutdown)
025	GTSP East Storage Building - South Scrubber (Permanently Shutdown)
026	GTSP Rock Hopper Bin
030	Molten Sulfur Storage and Handling System (Previously EU Nos. 030, 031, 032, 033, 035, 036, 037, 038, 039, 040, 041, 042, 043 & 050)
048	Phosphogypsum Stack

Project Description Proposed Emission Units

This project is for the installation of an auxiliary boiler (E.U. ID 053) that will replace the facility's existing auxiliary boiler (E.U. ID 001). After the auxiliary boiler is installed and operational, the facility's existing auxiliary boiler will be permanently shutdown and dismantled. The auxiliary boiler that will be installed will have a maximum design heat capacity of 100 MMBTU Btu/hr.

This project will add the following emissions unit.

Facility ID No. 01050055	
ID No.	Emission Unit Description
053	Auxiliary Boiler

NOTE: *Please reference the Permit No., Facility ID, and Emission Unit ID in all correspondence, test report submittals, applications, etc.*

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 62-213, F.A.C.
- The facility is a major stationary source in accordance with Rule 62-212.400(PSD), F.A.C.

PERMIT HISTORY/AFFECTED PERMITS

Concurrent with Permit No. 1050055-023-AV

SECTION 2. ADMINISTRATIVE REQUIREMENTS AND FACILITY-WIDE SPECIFIC CONDITIONS (DRAFT)

1. Permitting Authority: The permitting authority for this project is the Florida Department of Environmental Protection (Department), Southwest District's Air Resource Management Section. The Southwest District's mailing address and phone number is:

   Florida Department of Environmental Protection
   Southwest District Office
   Air Resource Management Section
   13051 North Telecom Parkway
   Temple Terrace, Florida 33637-0926
   Telephone: 813-632-7600

   All documents related to applications for permits shall be submitted to the above address.

2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Southwest District Office's Air Resource Management Section (see above mailing address and phone number).

3. Appendices: The following Appendices are attached as part of this permit:

   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: Unless otherwise exempt by rule, the permittee shall not initiate any construction, reconstruction, or modification at the facility and shall not install/modify any pollution control device at the facility without obtaining prior authorization from the Department. Modification is defined as: Any physical change or changes in the method of operations or addition to a facility that would result in an increase in the actual emissions of any air pollutant subject to air regulations, including any not previously emitted, from any emission unit or facility.
   [Rules 62-210.200 - Definition of "Modification" and 62-210.300(1)(a), F.A.C.]

7. Source Obligation (PSD Major facilities only):

   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.]

8. Annual Operating Report: On or before **April 1** of each year, the permittee shall submit a completed DEP Form 62-210.900(5), "Annual Operating Report for Air Pollutant Emitting Facility" (AOR) for the preceding calendar year. The report may be submitted electronically in accordance with the instructions received with the AOR package sent by the Department, or a hardcopy may be sent to the Compliance Authority.
[Rule 62-210.370(3), F.A.C.]

9. Application for Title V Air Operation Permit: A Title V permit revision is not required for this construction modification. This construction permit is being processed concurrently with a Title V renewal application (1050055-023-AV), which incorporates the changes made in this construction permit and include a compliance plan for this project.

A. EU No. 053 - Auxiliary Boiler

This section of the permit addresses the following emissions unit.

ID No.	Emission Unit Description
053	Auxiliary Boiler

PERFORMANCE RESTRICTIONS

A.1. Federal Regulatory Requirements: This emission unit is subject to 40 CFR 60, Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, which is adopted by reference in Rule 62-204.800, F.A.C.
[Rule 62-204.800(b), F.A.C.]

A.2. Permitted Capacity:

a. Hourly Fuel Usage Rates: The following hourly usage rates are for the purpose of emissions testing only, the permittee is not required to show compliance with these rate during normal operation:

(1) The maximum natural gas usage rate is 100,000 cu ft/hour (100 MMBTU/hour).

(2) The maximum fuel oil usage rate is 714 gals/hour (100 MMBTU/hour).

b. Annual Heat Input Capacity – The boiler is limited to a maximum annual heat input of 87,600 MMBTU for any consecutive 12-month period. This annual capacity is based on the total heat input from the sum of fuel oil and natural gas operation.

{Permitting Notes:

(1) In the revised application dated 4/25/2011, the applicant requested a 10% annual capacity factor for a boiler with a maximum design heat input capacity of 100 MMBTU/hour. This is equivalent to an annual capacity of 87,600 MMBTU.

(2) See Appendix D, Condition 1, for Operation Rate during Testing requirements. Annual Capacity Factor was requested by the applicant.}

[Revised Permit Application dated 4/25/2011; Rule 62-210.200(PTE), F.A.C.]

A.3. Authorized Fuel: The boiler is permitted to use natural gas, No. 1 fuel oil or No. 2 fuel oil as firing fuels. Fuel oils shall have a maximum sulfur content of 0.05%, by weight.
[Permit Application dated 11/29/2010; Rule 62-210.200(PTE), F.A.C.; Best Available Control Technology (BACT) Determination dated July 14, 2011.]

A.4. Hours of Operation: The hours of operation are not limited (8760 hours per year).
[Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

EMISSIONS STANDARDS

A.5. Visible Emissions Standard: Visible emissions from the boiler stack shall not exceed 20% opacity, except for one six-minute period per hour during which the opacity shall not exceed 27%.

{Permitting Note: 40 CFR 60, Subpart Dc, SO_2 Emissions Limit - Compliance with the BACT fuel oil sulfur limit of 0.05% will also satisfy the "sulfur dioxide emissions standard and fuel oil limit contained in 40 CFR 60.42c(d) and 40 CFR 60.42c(h) (Subpart Dc). }

[Rule 62-296.406(1), F.A.C.; 40 CFR 60.43c(c) (Subpart Dc)]

TESTING REQUIREMENTS

A.6. Initial Compliance Tests: The auxiliary boiler shall be tested to demonstrate initial compliance with the visible emissions standards. The initial tests shall be conducted within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial startup.
[Rules 62-4.070(3), F.A.C.; 40 CFR 60.8]

A.7. Compliance Tests After Initial Testing . During each federal fiscal year (October 1st to September 30th), the auxiliary boiler shall be tested to demonstrate compliance with the visible emissions standards. If the boiler does not fire fuel oil more than 400 hours per federal fiscal year, then the annual visible emissions test is not required. However, the Compliance Authority shall be notified that fuel oil has not been fired for more than 400 hrs for the current federal fiscal year prior to the end of the federal fiscal year. The permittee is required to perform a visible emissions test once every five years prior to permit renewal.
[Rules 62-297.310(7) and 62-4.070(3), F.A.C.]

A.8. Test Requirements: Tests shall be conducted in accordance with the applicable requirements specified in Appendix D (Common Testing Requirements) of this permit.
[Rule 62-297.310, F.A.C.]

A.9. Test Method: Required tests shall be performed in accordance with the following reference method.

Method(s)	Description of Method and Comments
9	Visual Determination of the Opacity of Emissions from Stationary Sources (The minimum test duration shall be sixty minutes)

The above method is described in Appendix A of 40 CFR 60 and are adopted by reference in Rule 62-204.800, F.A.C. No other method(s) may be used unless prior written approval is received from the Department.
[Rules 62-204.800 and 62-297.100, F.A.C.; and Appendix A of 40 CFR 60]

NOTIFICATION REQUIREMENTS

A.10. Test Notification: The permittee shall notify the Compliance Authority in writing at least 30 days prior to the initial compliance test. The notification must include the following information: the date, time, and location of each test; the name and telephone number of the facility's contact person who will be responsible for coordinating the test; and the name, company, and the telephone number of the person conducting the test.

{*Permitting Note: The notification should also include the relevant emission unit ID No(s)., test method(s) to be used, and pollutants to be tested.*}

[Rule 62-4.070(3), F.A.C.; 40 CFR 60.7(a)(6)]

A.11. Notification of Operation Commencement: The permittee shall notify the Compliance Authority in writing of the date of commencing operation of the E.U. No. 053, no later than fifteen (15) days after that date. Commencing operation means setting into operation of any emissions unit for any purpose.
[Rule 62-4.070, F.A.C., and Rule 62-210.200, F.A.C., (Definition of Commence Operation)]

RECORDS AND REPORTS

A.12. 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.
[Rule 62-297.310(8), F.A.C.]

A.13. Daily and Monthly Records: The permittee shall maintain the following records for the auxiliary boiler:

a. Daily Records
   (1) Facility Name, Emission Unit No. (053) and Date;
   (2) For each type of fuel used record:
      (a) the type of fuel,
      (b) the hours of operation of the boiler, and
      (c) the amount of fuel combusted in the boiler.

b. Monthly Records
   (1) Facility Name, Emission Unit No. (053), Month and Year.
   (2) For each type of fuel used record:
      (a) the type of fuel, and
      (b) the hours of operation for the most recent 12 consecutive month period.
   (3) The annual heat input calculated on a 12-month rolling total basis with a new annual heat input calculated at the end of each calendar month.

Daily records shall be completed by the end of the 3rd business day and monthly records shall be completed by the end of the following month.

[Rules 62-213.440(1)(b)2.b., 62-4.070(3) and 62-204.800(8)(b), F.A.C.; 40 CFR 60.48c(g)(Subpart Dc)]

A.14. Fuel Oil Analysis and Documentation. Compliance with the fuel oil's 0.05%, by weight, sulfur content limitation shall be demonstrated through either:

a. The fuel supplier documentation of fuel oil sulfur content for each shipment of oil delivered for use in the boiler per 40 CFR 60.48c(f). The records shall include a "fuel supplier certification" (40 CFR 60.48c(f)(2)) consisting of the name of the oil supplier and a statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in 40 CFR 60.41c and the sulfur content or maximum sulfur content of the oil; or

b. Actual fuel oil analysis per 40 CFR 60.46c(d)(2). Fuel sampling and analysis shall be in accordance with 40 CFR 60 Appendix A, Method 19, Section 12.5.2.2 (Liquid Fossil Fuel).

The permittee shall submit semiannual reports of the fuel oil supplier sulfur content certification records for any reporting period during which the boiler is fired with fuel oil. The semiannual report shall include a certified statement signed by the facility's Responsible Official that the records of the fuel supplier certifications submitted represent all of the fuel combusted during the period. The semiannual reports shall be submitted to the Compliance Authority within 30 days of the end of the reporting period.

[Rule 62-204.800(8)(b), F.A.C.; 40 CFR 60.48c(e)(11) (Subpart Dc)]