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

FINAL PERMIT

PERMITTEE

Mosaic Fertilizer, LLC
13830 Circa Cross Drive
Lithia, Florida 33547

Authorized Representative:
Mr. William V. Land,
Environmental Superintendant - Minerals

Air Permit No. 1050034-023-AC
Permit Expires: 06/01/2013
Site Name : Central Florida Mining Operations
Minor Air Construction Permit
Project Name: Dry Phosphate Rock Unloading Processes

This is the final air construction permit for the construction of one railcar unloading process and two truck unloading processes that will be used unload dry phosphate rock. The proposed work will be conducted at the Mosaic Fertilizer, LLC, Central Florida Mining Operations (Standard Industrial Classification No. 1475).

The three unloading process and their corresponding locations are as follows: (1) the "Rail Car Dump Inside Building" will be located approximately 700 ft north of Four Corners Mine Road and 2.1 miles west of State Road 37 in Hillsborough County; (2) the "Truck Dump Inside Building" will be located approximately 200 ft north of Four Corners Mine Road and 1.8 miles west of State Road 37 in Hillsborough County; and (3) the "Truck Dump to Product Storage Pile" will be located approximately 1,100 ft south of Four Corners Mine Road and 1.7 miles west of State Road 37 in Manatee County. The UTM coordinates are Zone 17, 392.96 km East, and 3058.55 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

Due to 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

_____ _____

Robert C. Wong Effective Date
District Air Program Administrator
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. William V. Land, Mosaic Fertilizer, LLC (William.Land@mosaicco.com)
Mr. Rama Iyer, P.E., Mosaic Fertilizer, LLC (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.

_____ _____

(Clerk) (Date)

FACILITY AND PROJECT DESCRIPTION

Existing Facility

The Mosaic Fertilizer LLC - Central Florida Mining Operations facility is located on contiguous property within four adjacent counties (Hillsborough, Manatee, Polk, and Hardee) and involves five sites: Fort Green, Four Corners, Kingsford, Lonesome and Noralyn.

There is no mining at Noralyn and Kingsford but Mosaic still has reclamation liability at these sites. Fort Green has a mini-washer and material mined from Fort Green and Payne Creek is processed through Four Corners, Wingate or Hookers Prairie. Lonesome is an active mine but the material mined is processed through Four Corners. Four Corners is an active mine with washer and float units.

Also included in this facility are five exempt sites: Agrock, Clear Springs, Payne Creek, Phosphoria and Pierce where Mosaic has varying degrees of reclamation liability, clay ponds and outfalls.

The existing facility includes a permitted flocculation system which is located approximately 150 ft north of Flour Corners Mine Road and 1.7 miles west of State Road 37 in Hillsborough County.

The existing facility consists of the following emissions units.

Facility ID No. 1050034	
ID No.	Emission Unit Description
029	Flocculation System – Four Corners Mine

Project Description and Proposed Emission Units

This project is for the construction of three dry phosphate rock unloading processes at the Mosaic Fertilizer, LLC, Four Corners Mine facility. Two of the proposed phosphate rock unloading processes will be located in Hillsborough County and one will be located in Manatee County. The three processes will include rock unloading via a railcar dump inside a building, a truck dump inside a building and a truck dump on a storage pile. Ultimately, dry phosphate rock will be unloaded via one of the three processes, mixed with wet phosphate rock produced at the site, and loaded out using the facility's existing railcar loadout equipment.

This project will create the following emissions units.

Facility ID No. 1050034	
ID No.	Emission Unit Description
031	Dry Phosphate Rock Unloading and Loadout

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

Exempt Emission Units/Activities

Rule 62-4.040 Exemption - The following emission units and/or activities are considered exempt from permitting pursuant to Rule 62-4.040, F.A.C.:

- Mining Sites: Agrock, Clear Springs, Payne Creek, Phosphoria and Pierce.

Rule 62-210.300(3)(a) Exemptions - The following emission units and/or activities are considered exempt from permitting pursuant to Rule 62-210.300(3)(a) , F.A.C.

- York-Shipley Boiler, Model No.SPHC-100-5 – 3.3 MMBtu/Hour maximum heat input
- Portable Electric Generators – 500 KW
- Fuel Heater
- Propane Boiler
- Brazing, Soldering and Welding.

Rule 62-210.300(3)(b) Exemptions - The following emission units and/or activities are considered exempt from permitting pursuant to Rule 62-210.300(3)(b) , F.A.C.

- Wood Working Activities (i.e., saws, planners)

FACILITY REGULATORY CLASSIFICATION

– The facility is not 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 not a Title V major source of air pollution in accordance with Chapter 62-213, F.A.C.

– The facility is not a major stationary source in accordance with Rule 62-212.400(PSD), F.A.C.

– This facility is a synthetic non-Title V source for PM_{10}.

PERMIT HISTORY/AFFECTED PERMITS

Replaces Permit No. 1050034-022-AC.

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

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. 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.]

8. Application for Non-Title V Air Operation Permit: This permit authorizes construction or modification of the permitted emissions unit(s) and initial operation to determine compliance with Department rules. A Non-Title V air operation permit is required for continued operation of the permitted emissions unit(s). The permittee shall apply for a Non-Title V air operation permit at least 90 days prior to expiration of this permit, but no later than 180 days after commencing operation or commencing operation as modified. Commencing operation means setting into operation of any emissions unit for any purpose. To apply for a Non-Title V air operation permit, the applicant shall submit the following:

   a. the appropriate permit application form *(see current version of Rule 62-210.900, F.A.C. (Forms and Instructions), and/or FDEP Division of Air Resource Management website at: http://www.dep.state.fl.us/air/)*;

   b. the appropriate operation permit application fee from Rule 62-4.050(4)(a), F.A.C.;

   c. a copy of the most recent compliance test report(s) required by Specific Condition No. A.13, if not previously submitted; and

   d. copies of the most recent two months of records/logs specified in Specific Condition No. A.14.

   The application shall be submitted to the Permitting Authority.

   [Rules 62-4.030, 62-4.050 and 62-4.220, F.A.C.]

A. EU No. 031 - Dry Phosphate Rock Unloading and Loadout

This section of the permit addresses the following emissions unit.

ID No.	Emission Unit Description
031	Dry Phosphate Rock Unloading and Loadout: This emissions unit will include three dry phosphate rock unloading processes. These unloading processes allow the facility to receive and unload dry phosphate rock from railcars and/or trucks, mix it with wet phosphate rock produced at the facility, and load out the resultant phosphate rock mixture using the facility's existing railcar loadout equipment. The three unloading processes are briefly described below: (1) Unloading Process 1 - Rail Car Dump Inside Building: Rail cars containing dry phosphate rock will enter the facility and proceed to a new railcar unloading building located near the railroad loadout in the northeastern section of the facility's property. The railcar unloading building will contain a hopper, conveyor, elevator arrangement and a baghouse to control particulate matter emissions. The dry phosphate rock will be bottom discharged from the railcar inside building onto a conveyor which will discharge to an elevator. The elevator will discharge to a conveyor which will exit the building and discharge into a new 3500 ton hopper. The 3500 ton hopper will discharge on to a new conveyor that will discharge to one of the two existing 1500 ton railcars loadout bins. Dry phosphate rock from the conveyor will be mixed with incoming wet rock from the facilities wet rock pile. The mixed wet rock will then be loaded out via railcars. A 15,000 ACFM Pulse Jet baghouse will be used to control particulate matter emissions from the building and water sprays will be used to control particulate matter emissions from the outdoor drop points in the process. This operation will be located approximately 700 ft north of Four Corners Mine Road and 2.1 miles west of State Road 37 in Hillsborough County. (2) Unloading Process 2 - Truck Dump Inside Building: Dump trucks containing dry phosphate rock will enter the facility from State Road 37 and proceed west along the paved facility road to the new truck unloading building located to the east of the washer structure and to the north of the product storage pile area. The building will contain a hopper, conveyor, elevator arrangement and a baghouse to control particulate matter emissions. The building's truck ingress and egress will be equipped with polyethylene curtains to provide additional dust control. Dry phosphate rock will be discharged from the truck inside building onto a conveyor which will discharge to an elevator. The elevator will discharge to a new covered conveyor outside the building which will convey the dry phosphate rock to a new 3,500 ton hopper (as in Unloading Process 1). The dry phosphate rock will then be conveyed via a new covered conveyor to either one of the existing 1,500 ton railcar loadout bins to mix with incoming wet rock from the product wet rock pile. The mixed wet rock will then be loaded out via railcars. The process uses the same existing railcar loadout bins used in Unloading Process 1. A 15,000 ACFM Pulse Jet baghouse will be used to control particulate matter emissions from the building and

	water sprays will be used to control particulate matter emissions from the outdoor drop points in the process. This operation will be located approximately 200 ft north of Four Corners Mine Road and 1.8 miles west of State Road 37 in Hillsborough County. (3) Unloading Process 3 - Truck Dump to Product Storage Pile: Dump trucks containing dry phosphate rock will enter the facility from State Road 37 and proceed west along the paved facility road to the product storage pile in the south west section of the facility property. Dump trucks will enter the pile area and will back into a 3 sided enclosure consisting of a 2 shrouds (or screens) located near the sides of the truck and the pile acting as the third side. The three sided enclosure will reduce the wind speed blowing across the material as it is discharged from the truck. Additionally, dry phosphate rock discharged from the truck will be sprayed with water to minimize particulate matter emissions. Wetted rock will be mixed with other phosphate rock and transferred via the existing conveyor to the rail car loadout station. This operation will be located approximately 1,100 ft south of Four Corners Mine Road and 1.7 miles west of State Road 37 in Manatee County.

PERFORMANCE RESTRICTIONS

A.1. Permitted Capacity: The maximum quantity of dry phosphate rock unloaded for all three unloading operations (i.e., two truck unloading operations and one railcar unloading operation) combined shall not exceed 2 million tons per any consecutive 12 month period. [Permit Application dated 11/12/2010 and Rule 62-210.200(PTE), F.A.C.]

A.2. Authorized Material: The three unloading processes included in this emissions unit are authorized to be handle phosphate rock.
[Permit Application dated 11/12/2010 and Rule 62-210.200(PTE), F.A.C.]

A.3. 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.]

A.4. Unconfined Particulate Emissions: In addition to the unconfined particulate emissions requirements described in Appendix C., the following additional precautions shall also be taken:

a. Water spray shall be available at all outdoor drop points and shall be used whenever there are unconfined emissions at these points.
b. Outdoor conveyors shall be covered to the extent that is practical.
c. Hoppers shall be equipped with windscreens to the extent that is practical.
d. Operations shall be curtailed or ceased when necessary.
e. Paved roads within the facility shall be cleaned and swept to a practical extent to minimize particulate matter becoming airborne.
f. Truck speeds shall be limited to 35 mph.

g. Water trucks shall be used as and when necessary.

[Permit Application dated 11/12/2010 and Rule 62-296.320(4)(c), F.A.C.]

EMISSIONS STANDARDS

A.5. PM Emissions Standard - Baghouse Emission Control Devices: For the two baghouse control devices located in Hillsborough County (i.e., Rail Car Dump Building Baghouse and Truck Dump Building Baghouse) emissions of particulate matter from each baghouse vent shall not exceed 0.03 gr/dscf. To demonstrate compliance with this standard, a visible emissions test indicating no visible emissions (5 percent opacity) may be submitted in lieu of a particulate stack test.
[Rules 62-296.711(1)(a) and 62-296.711(3)(c) F.A.C.; EPC of Hillsborough County Rule 1-3.51]

A.6. Visible Emissions Standard – Truck and Railcar Loading and Unloading: For the truck and railcar processes located in Hillsborough County (i.e., "Rail Car Dump Inside Building" and "Truck Dump Inside Building"), a maximum 5% opacity standard shall apply to the following emissions sources:

Emission Point No.	Brief Description
1	From Rail Car Dump Building Conveyor into 3500 Ton Hopper
2	From Rail Car Dump Building 3500 Ton Hopper onto Conveyor
3	From Truck Dump Building Conveyor into 3500 Ton Hopper
4	From Truck Dump Building 3500 Ton Hopper onto Conveyor
5 & 6	From two Conveyors into 1500 Ton Railcar Loadout Bins
7 & 8	From Loadout Bins into Railcar

[Rule 62-070(3), F.A.C., EPC of Hillsborough County Rule 1-3.52]

TESTING REQUIREMENTS

A.7. Initial Compliance Tests: Each baghouse specified in Specific Condition No. A.5. shall be tested to demonstrate initial compliance with the particulate matter emissions standard. Each emissions source specified in Specific Condition No. A.6. shall be tested to demonstrate initial compliance with the visible emissions standard. The initial tests shall be conducted no later than 90 days after initial operation of the unit.
[Rules 62-4.070(3) and 62-297.310(7)(a)1, F.A.C.]

A.8. Compliance Tests After Initial Testing: During each federal fiscal year (October 1st to September 30th), each baghouse specified in Specific Condition No. A.5. shall be tested to demonstrate compliance with the particulate matter emissions standard and each emissions source specified in Specific Condition No. A.6. shall be tested to demonstrate compliance with the visible emissions standard.

[Rule 62-297.310, F.A.C.]

A.9. 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.10. Test Method(s): Required tests shall be performed in accordance with the following reference method.

Method(s)	Description of Method and Comments
1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content,
5	Determination of Particulate Matter Emissions from Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources

The above method(s) are 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.

{Permitting Note: A visible emissions test indicating no visible emissions (5 percent opacity) may be submitted in lieu of a particulate stack test for the Rail Car Dump Building Baghouse vent and Truck Dump Building Baghouse vent (see Specific Condition No. A.5.) per Rule 62-296.711(3)(c)}

[Rules 62-204.800 and 62-297.100, F.A.C.; and Appendix A of 40 CFR 60]

NOTIFICATION REQUIREMENTS

A.11. Test Notification: The permittee shall notify the Compliance Authority in writing at least 15 days prior to any required tests. 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.*}

[Rules 62-4.070(3) and 62-297.310(7)(a)9., F.A.C.]

A.12. Notification of Operation Commencement: The permittee shall notify the Compliance Authority in writing of the date of commencing operation of the EU No. 31, no later than five (5) business 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.13. 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.14. Daily and/or Monthly Log: To document compliance with the requirements of Specific Condition Nos. A.1. and A.2., the following daily and monthly records shall be maintained:

a. Records for Each Unloading Event:
   (1) facility name, facility ID No. and emission unit ID No.;
   (2) date;
   (3) description of unloading event (e.g., railcar unloading in building, truck unloading in building, truck unloading on storage pile);
   (4) total quantity of dry phosphate rock unloaded for each unloading event (tons);

b. Monthly Records:
   (1) facility name, facility ID No. and emission unit ID No.;
   (2) month and year;
   (3) total quantity of dry phosphate rock unloaded for the month (tons);
   (4) total quantity of dry phosphate rock unloaded for the most recent consecutive 12 month period (tons).

[Rule 62-4.070(3), F.A.C.]

A.15. Records Retention: Unloading Event records shall be completed within 5 business days after the end of the event. Monthly records shall be completed by the end of the next month. These records shall be maintained at the facility for at least 3 years and shall be made available to the Department upon request.
[Rules 62-4.070(3)]