FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

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

RICK SCOTT
GOVERNOR

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LT. GOVERNOR

HERSCHEL T. VINYARD JR.
SECRETARY

DRAFT PERMIT

PERMITTEE

Mosaic Fertilizer, LLC
New Wales Facility
13830 Circa Crossing Drive
Lithia, FL 33547

Air Permit No. 1050059-091-AC
Permit Expires: 12/31/2015
New Wales Facility
Minor Air Construction Permit
Project: Concrete Batch Plant

Authorized Representative:
Mr. Ghani Baig, Environmental Manager

This is the final air construction permit to add a temporary concrete batch plant to the facility to remediate a geological anomaly in the facility's closed gypsum stack area. The proposed work will be conducted at the Mosaic Fertilizer, LLC New Wales Facility (Standard Industrial Classification No. 2874). The facility is located in Polk County at 3095 Highway 640 in Mulberry, Florida. The UTM coordinates are Zone 17, 396.6 km East, and 3078.9 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

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

DRAFT

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Kelley M. Boatwright Effective Date
Permitting & Waste Cleanup 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 the date indicated below to the persons listed below.

Ghani Baig, Mosaic Fertilizer, LLC (ghani.baig@mosaicco.com)

Rama Iyer, P.E., Mosaic Fertilizer, LLC (rama.iyer@mosaicco.com)

Danielle Henry, FDEP – SWD (Danielle.D.Henry@dep.state.fl.us)

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

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(Clerk) (Date)

FACILITY AND PROJECT DESCRIPTION

Existing Facility

This facility is a phosphate fertilizer manufacturing complex. The fertilizer complex processes phosphate rock into several different fertilizer products and animal feed ingredients. This is accomplished by reacting phosphate rock with sulfuric acid to produce phosphoric acid and then converting the phosphoric acid to fertilizer and animal feed ingredient products. This facility consists of five double absorption sulfuric acid plants; three phosphoric acid plants; a phosphoric acid clarification and storage area; three di-ammonium phosphate (DAP) plants; a mono-ammonium phosphate (MAP) prill plant; a granular mono-ammonium phosphate (GMAP) plant; an animal feed ingredients (AFI) plant; a molten sulfur storage & handling system; a limestone storage silo/rock grinding operation; and a phosphogypsum stack. The existing facility consists of the following emissions units (EUs).

Facility ID No. 1050059

EU ID No.	Emissions Unit Description
Regulated Emissions Units	
002	No. 1 Sulfuric Acid Plant
003	No. 2 Sulfuric Acid Plant
004	No. 3 Sulfuric Acid Plant
042	No. 4 Sulfuric Acid Plant
044	No. 5 Sulfuric Acid Plant
008	Phosphoric Acid Plant (East)
017	Phosphoric Acid Plant (West)
039	Phosphoric Acid Plant No. 3
053	Phosphoric Acid Clarification and Storage Area
048	30% Clarification Area (Area 10)
009	DAP Plant No. 1
045	DAP Plant No. 2 - East Train
046	DAP Plant No. 2 - West Train
047	DAP Plant No. 2 - West Product Cooler
056	DAP Plant No. 2 - East Product Cooler
011	MAP Prill Plant
055	MAP Prill Plant Cooler
015	Animal Feed Ingredients (AFI) Shipping/Truck Loadout
023	AFI Storage Silos (3)--North Side
024	AFI Storage/Shipping/Rail Car Loading
025	AFI Limestone Storage Silos (2)
026	AFI Silica Storage Bin
027	AFI Granulation Plant
028	AFI Storage Silos (3)—South Side
052	AFI Limestone Feed Bin

030	Soda Ash Unloading System
060	7,500 Ton Rail Storage Molten Sulfur Storage Tank
062	15,000 Ton Molten Sulfur Storage Tank
063	1,500 Ton Truck Unloading Pit, Sulfur Pit (North)
067	1,500 Ton Truck Unloading Pit, Sulfur Pit Front Vent
068	1,500 Ton Truck Unloading Pit, Sulfur Pit Rear Vent
064	350 Ton Truck Unloading Pit, Sulfur Pit (South)
069	350 Ton Truck Unloading Pit, Sulfur Pit Vent
065	800 Ton Railcar Unloading Pit
066	200 Ton Molten Sulfur Transfer Pit
080	1 Molten Sulfur Loading Station
070	Limestone Storage Silo/Rock Grinding
071	Phosphogypsum Stack
078	GMAP Plant
087	Existing Emergency CI RICE $\leq$ 500 HP
Unregulated Emissions Units and Activities	
072	Facility-Wide Fugitive Emissions - SO_2, SO_3, SAM and NOx emissions from the 1, 2, 3, 4 and 5 Sulfuric Acid Plants (SAPs) - Fluoride emissions from the Phosphoric Acid Plants (PAPs) East and West and No. 3 PAP - Fluoride, NH_3, PM emissions from Diammonium Phosphate (DAP), Monoammonium Phosphate (MAP) and Granular Monoammonium Phosphate GMAP Plants. - Hydrogen Fluoride (HF) emissions from the Phosphogypsum Stack and Cooling Pond *Note: For this emission unit, Annual Operation Report (AOR) emissions estimates are required only for Hydrogen Fluoride emissions from the Phosphogypsum Stack and Cooling Pond.*
012	GMAP Plant Storage Building

Project Description and Proposed Emission Unit

This project will add a temporary concrete batch plant to the facility to remediate a geological anomaly in the facility's closed gypsum stack area. The concrete batch plant will use materials such as sand tailings, pea gravel, cement and fly ash to make grout that will be pumped into the anomaly. This project will add the following emissions unit (EU).

EU ID No.	Emissions Unit Description
092	Concrete Batch Plant

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 (HAPs).
- 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

Reference current Operation Permit 1050059-088-AV.

1. Permitting Authority - The permitting authority for this project is the Florida Department of Environmental Protection (Department), Southwest District Office's Air and Solid Waste Permitting Program. The mailing address and phone number is:

Florida Department of Environmental Protection
Southwest District Office
Air and Solid Waste Permitting Program
13051 North Telecom Parkway
Temple Terrace, Florida 33637-0926
Telephone: 813-470-5700

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

2. Compliance Authority - The compliance authority for this project is the Florida Department of Environmental Protection (Department), Southwest District Office's Compliance Assurance Program. The mailing address and phone number is:

Florida Department of Environmental Protection
Southwest District Office
Compliance Assurance Program
13051 North Telecom Parkway
Temple Terrace, Florida 33637-0926
Telephone: 813-470-5700

All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the above address.

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 Title V Air Operation Permit - This permit authorizes construction of the permitted emissions unit and initial operation to determine compliance with Department rules. A Title V air operation permit is required for continued operation of the permitted emissions unit. The permittee shall apply for a 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 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. a copy of the initial compliance test report(s) required by Specific Condition No. A.11. if not previously submitted; and

c. copies of the most recent month of records/logs specified in Specific Condition No. A.12.

(Permitting Note: This permit authorizes construction of a temporary concrete batch plant which is expected to be on site for approximately six months. Because the scope of this project is limited, operation is only temporary, and the facility may no longer contain the emissions unit (i.e., concrete batch plant) when a permit revision application is required pursuant to Rule 62-213.420(3), F.A.C., a Title V air operation permit revision application may not be required.)

[Rules 62-4.030, 62-4.050, 62-213.400. 62-213.412(1)&(3), 62-213.420(3), 62-213.430, F.A.C.]

A. EU No. 092 – Concrete Batch Plant

This section of the permit addresses the following emissions unit (EU).

EU ID No.	Emissions Unit Description
092	Concrete Batch Plant - This emissions unit consists of a temporary concrete batch plant that will be used to remediate a geological anomaly in the facility's closed north gypsum stack area. The batch plant will use materials such as sand tailings, pea gravel, cement and fly ash to make grout that will be pumped into the anomaly. The batch plant will consists of the following items and equipment: 1) a cement silo and cement weigh pod, 2) A flyash silo and flyash weigh pod, 3) an aggregate stock pile and a screened aggregate stock pile, 4) a power screener (use to screen aggregate), 5) an aggregate hopper, 6) a dry blender box, 7) a water /bentonite slurry mixer, and 8) screw conveyors (use to move materials). The storage silos, weigh pods and dry blender are equipped with cartridge filters to control particulate emissions during loading events. Aggregate, cement and flyash material will be received on-site via trucks. Screened aggregate material will be loaded into the aggregate hoppers via front end loaders and screw conveyors will move the material from the hoppers to weigh pods for batching. Screw conveyors will transfer the batch mix (cement and flyash) from weigh pods to a dry blender into which aggregate will be added. A covered conveyor will then transfer the blended material from the dry blender to the cement truck into which a water/bentonite slurry will also be added. The cement truck will mix all the materials to form the grout and then delivers it to the remediation site to be pumped into the geological anomaly. The concrete batch plant will include several reciprocating internal combustion engines (RICE). This includes a 230 kW diesel generator, the bentonite mixer, two 350 acfm air compressors, a power screener, and five pumps. *Note: Because the concrete batch plant is trailer mounted, the engines can potentially be classified as mobile RICE and therefore may not be subject to stationary RICE rules (i.e., 40 CFR 60, IIII or 40 CFR 63, Subpart ZZZZ). Please see the definition of stationary reciprocating internal combustion engine in 40 CFR 60.4219 and 40 CFR 63.6675 and the definition of non-road engines as defined in 40 CFR 1068.30 (nonroad engine (2)(iii)).*

PERFORMANCE RESTRICTIONS

A.1. Permitted Capacity – For the purpose of limiting the emissions unit's potential to emit, the fuel usage rate of this emissions unit shall be limited to a maximum of 107,700 gal during the duration of the project. [Permit Application dated 08/19/2014 and Rule 62-210.200 (definition of Potential to Emit), F.A.C.]

A.2. Restricted Operation - The hours of operation are not limited (8760 hours per year). [Rules 62-4.070(3) and 62-210.200 (definition of Potential to Emit), F.A.C.]

A.3. Maximum Onsite Duration of Engines – The maximum duration of time that the concrete batch plant and the associated RICE are located at the facility shall not exceed 12 consecutive months.

*{**Permitting notes**: To satisfy the definition of nonroad engines and avoid classification as a stationary RICE, the engines associated with the concrete batch plant must: (1) be portable or transportable, meaning designed to be and capable of being carried or moved from one location to another. Indicia of transportability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform, and (2) must not remain at the location for more than 12 consecutive months. Please see 40 CFR 60.4219, 40 CFR 63.6675, 40 CFR 1068.30 nonroad engine (1)(iii) & (2)(iii).}*

[Rule 62-4.070(3), F.A.C.; *40 CFR 60.4219 (40 CFR 60, Subpart IIII) and 40 CFR 63.6675 (40 CFR 63, Subpart ZZZZ)*]

EMISSIONS STANDARDS

A.4. Visible Emissions Standard - Emissions from silos, weigh hoppers (batchers), and other enclosed storage and conveying equipment shall be controlled to the extent necessary to limit visible emissions to five (5) percent opacity.
[Rule 62-296.414(1), F.A.C.]

A.5. Unconfined Emissions - The owner or operator shall take reasonable precautions to control unconfined emissions from hoppers, storage and conveying equipment, conveyor drop points, truck loading and unloading, roads, parking areas, stock piles, and yards as required by paragraph 62-296.320(4)(c), F.A.C. For this concrete batching plant the following shall constitute reasonable precautions:

a. Management of roads, parking areas, stock piles, and yards, which shall include one or more of the following:
   1. Paving and maintenance of roads, parking areas, and yards (if appropriate).
   2. Application of water or environmentally safe dust-suppressant chemicals when necessary to control emissions.
   3. Removal of particulate matter from roads and other paved areas under control of the owner or operator to mitigage reentrainment, and from building or work areas to reduce airborne particulate matter (if appropriate).
   4. Reduction of stock pile height or installation of wind breaks to mitigate wind entrainment of particulate matter from stock piles (if appropriate).
b. Use of spray bar, chute, or partial enclosure to mitigate emissions at the drop point to the truck, as needed.

[Rule 62-296.414(2), F.A.C.]

COMPLIANCE TESTING REQUIREMENTS

A.6. Compliance Tests - The emissions unit shall be tested to demonstrate initial compliance with the emissions standards for Visible Emissions. The initial tests shall be conducted no later than 30 days after initial operation of the unit.
[Rules 62-4.070(3) and 62-297.310(7)(a)1., F.A.C.]

A.7. Compliance Test Requirements - Compliance tests shall be conducted in accordance with the applicable requirements specified in Appendix D (Common Testing Requirements) of this permit. Additionally,

visible emissions tests of silo dust collector exhaust points shall be conducted while loading the silo at a rate that is representative of the normal silo loading rate. The minimum loading rate shall be 25 tons per hour unless such rate is unachievable in practice.

1. If emissions from the weigh hopper (batcher) operation are also controlled by the silo dust collector, the batching operation shall be in operation during the visible emissions test. The batching rate during the emissions test shall be representative of the normal batching rate and duration. Each test report shall state the actual silo loading rate during emissions testing and, if applicable, whether or not batching occurred during emissions testing.
2. If emissions from the weigh hopper (batcher) operation are controlled by a dust collector which is separate from the silo dust collector, visible emissions tests of the weigh hopper (batcher) dust collector exhaust point shall be conducted while batching at a rate that is representative of the normal batching rate and duration. Each test report shall state the actual batching rate during emissions testing.

[Rules 62-296.414(3) and 62-297.310, F.A.C.]

A.8. Compliance Test Method - Required compliance tests shall be performed in accordance with the following reference method.

Method	Description of Method and Comments
9	Visual Determination of the Opacity of Emissions from Stationary Sources

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

NOTIFICATION REQUIREMENTS

A.9. 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.10. Notification of Operation Commencement - The permittee shall notify the Compliance Authority in writing of the date of commencing operation of the EU No. 092 after completing the modifications authorized by this permit, no later than fifteen (15) days after that date. Commencing operation means setting into operation of any emissions unit for any purpose.
[Rules 62-4.070, and 62-210.200, F.A.C., (definition of Commence Operation)]

RECORDKEEPING AND REPORTING REQUIREMENTS

A.11. Compliance Test Reports - The permittee shall prepare and submit reports for all required compliance 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.12. Monthly Fuel Usage - The permittee shall maintain the following monthly diesel fuel usage records:

a. the facility ID (1050059), Emission Unit ID No. (EU No. 092), and description;

b. the month and year; and

c. the total quantity of diesel fuel burned in gallons during the month.

d. the total quantity of diesel fuel burned in gallons during the most recent consecutive 12-month period.

All monthly records shall be completed by the end of the following month.

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

A.13. Onsite Duration of Engines - The permittee shall maintain records to demonstrate that the nonroad engines associated with the concrete batch plant remained at the facility for no more than 12 consecutive months. This should include documentation that shows the delivery dates and removal dates.

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