

# FLORIDA DEPARTMENT OF

**ENVIRONMENTAL PROTECTION** 

BOB MARTINEZ CENTER 2600 BLAIR STONE ROAD TALLAHASSEE, FLORIDA 32399-2400 RICK SCOTT GOVERNOR

CARLOS LOPEZ-CANTERA LT. GOVERNOR

JONATHAN P. STEVERSON SECRETARY

**Riverview Facility** 

Hillsborough County

Permit No. 0570008-080-AC

Permit Expires: August 1, 2018

SO<sub>2</sub> Emissions Reduction Project

#### PERMITTEE

Riverview Facility Mosaic Fertilizer, LLC 13830 Circa Crossing Drive Lithia, Florida 33547

Authorized Representative: Mr. Robert Fredere, Plant Manager

#### PROJECT

This is the final air construction permit for the  $SO_2$  Emissions Reduction Project at the Riverview Facility, which include physical and operational changes to reduce ambient  $SO_2$  emissions and ambient impacts from the facility.

The Riverview Facility is an existing phosphate fertilizer manufacturer categorized under Standard Industrial Classification Number (No.) 2874. The existing facility is located in Hillsborough County at 8813 U.S. Highway 41 South in Riverview, Florida. UTM Coordinates are: Zone 17, 363.23 kilometers (km) East and 3082.56 km North. Latitude is: 27°51'39" North; and, Longitude is: 82°23'21" West.

This final permit is organized into the following sections: Section 1 (General Information); Section 2 (Administrative Requirements); Section 3 (Emissions Unit Specific Conditions); and Section 4 (Appendices). Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix CF of Section 4 of this permit

#### STATEMENT OF BASIS

This air pollution construction 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.). 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 requirements for major new source review in Chapter 62-212, F.A.C.

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 Tallahassee, Florida

*for:* Jeffery F. Koerner, Program Administrator Office of Permitting and Compliance Division of Air Resource Management

JFK/dlr/sms

www.dep.state.fl.us

## **CERTIFICATE OF SERVICE**

The undersigned duly designated deputy agency clerk hereby certifies that this final air permit package (including the Final Determination and Final Permit with 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 following persons.

Mr. Robert Fredere, Mosaic Fertilizer, LLC: <u>robert.fredere@mosaicco.com</u>

- Mr. Rama Iyer, P.E., Mosaic Fertilizer, LLC: <u>rama.iyer@mosaicco.com</u>
- Mr. Jeff Stewart, Mosaic Fertilizer, LLC: jeff.stewart@mosaicco.com
- Ms. Kelley Boatwright, DEP SWD: <u>kelley.boatwright@dep.state.fl.us</u>
- Ms. Heather Ceron, U.S. EPA Region 4: ceron.heather@epa.gov
- Ms. Diana Lee, P.E., HCEPC: lee@epchc.org
- Mr. Thomas G. Rogers, DEP OBP: tom.rogers@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.

#### FACILITY DESCRIPTION

This existing Mosaic Riverview facility consists of several industrial processes that convert insoluble rock containing phosphorus ore into a soluble form suitable for agricultural use. The processes consist of one phosphoric acid plant (two trains), two ammoniated phosphate (AP) plants, three sulfuric acid plants (SAP), one material handling system, one auxiliary boiler, two animal feed plants, a molten sulfur storage and handling system and emergency compression ignition reciprocating internal combustion engines. This facility consists of the emissions units shown below. The emission units affected by this permitting action are highlighted in yellow.

EU No.	Brief Description			
	Regulated Emissions Units			
004	No. 7 Sulfuric Acid Plant			
005	No. 8 Sulfuric Acid Plant			
006	No. 9 Sulfuric Acid Plant			
007	No. 6 AP Plant			
051	Conveyor No. 9 Transfer Points and Railcar Unloading			
052	Conveyor No. 9 to Shipping Belt Conveyor			
053	Vessel Loading Operation			
055	No. 5 Granulation Plant			
058	Conveyor No. 6 to Conveyor No. 7			
059	Conveyor No. 7 to Conveyor No. 8			
060	Screening Tower and Conveyor No. 8 to Conveyor No. 9			
061	East Vessel Loading Facility - Shiphold/Chokefeed			
063	Molten Sulfur Storage and Handling System – Tank #1, 2 and 3			
066	Molten Sulfur Storage and Handling System Pit #7			
067	Molten Sulfur Storage and Handling System Pit #8			
068	Molten Sulfur Storage and Handling System Pit #9			
073	Phosphoric Acid Production Facility			
074	Molten Sulfur Storage and Handling System Truck Loading Station			
075	AP Storage Building Nos. 2, 4, 5 & 6			
076	Loadout between Buildings 2 & 4			
077	Loadout adjacent to Building 6			
078	Animal Feed Ingredient (AFI) Plant No. 1			
079	Diatomaceous Earth (DE) Silo			
080	Limestone Silo			

# LIST OF EMISSION UNITS.

Animal Feed Plant (AFI) Loadout System

Animal Feed Ingredient (AFI) Plant No. 2

Phosphogypsum Stack North (No. 1)

Phosphogypsum Stack South (No 2.)

081

103

104

108

#### SECTION 1. GENERAL INFORMATION

EU No.	Brief Description
109	Clarifier and Storage Tanks
111	Existing Emergency Stationary RICE < or equal to 500 HP
112	Auxiliary Steam Boiler
113	Non-Emergency CI ICE
	Miscellaneous Emissions Units and Activities
105	<ul> <li>Facility-Wide Fugitive Emissions:</li> <li>Sulfur dioxides (SO<sub>2</sub>), sulfur trioxides (SO<sub>3</sub>), sulfuric acid mist (SAM) emissions from the <u>7, 8</u> <u>&amp; 9 Sulfuric Acid Plants</u></li> <li>Fluoride emissions from the <u>Phosphoric Acid Plant</u></li> <li>Fluoride, ammonia (NH<sub>3</sub>), particulate matter (PM) emissions from the <u>Nos. 5 &amp; 6 Granulation</u> <u>Plants</u></li> <li>Hydrogen Fluoride emissions from the <u>Phosphogypsum Stacks</u> and <u>Cooling Ponds</u></li> <li><i>Note: For this emissions unit, Annual Operation Report (AOR) emissions estimates are required</i> <i>only for the Hydrogen Fluoride emissions from the Phosphogypsum Stacks and Cooling Ponds</i>.</li> </ul>

## PROPOSED PROJECT

The purpose of the project is to reduce  $SO_2$  emissions and ambient impacts from the facility. Specifically, the permit requires:

- Elimination of the use of oil at the plant except during periods of natural gas curtailment or disruption.
- Changing/augmenting the catalysts in the converters in SAP Nos. 7, 8 and 9, which will lower SO<sub>2</sub> emissions while not increasing sulfuric acid mist (SAM) emissions. Note that the existing permitted capacities of the plants will remain the unchanged.
- Increasing the stack height of each SAP to no lower than 65 meters (213.25 feet) which is equivalent to approximately a 60-foot increase per stack.
- Comply with specific SO<sub>2</sub> emissions standards and caps based on a 24-hour block average as determined by CEMS data.

# FACILITY REGULATORY CLASSIFICATION

- The existing facility is a major source of HAP.
- The existing facility is a Title V major source of air pollution in accordance with Chapter 62-213, F.A.C.
- The existing facility is a major stationary source in accordance with Rule 62-212.400 (PSD), F.A.C.
- This facility does not operate units subject to the acid rain provisions of the Clean Air Act (CAA)
- The facility operates units that are subject to the New Source Performance Standards (NSPS) at 40 Code of Federal Regulations, Part 60 (40 CFR 60), and the National Emissions Standards for Hazardous Air Pollutants (NESHAP) at 40 CFR 63.

- <u>Permitting Authority</u>: The permitting authority for this project is the Office of Permitting and Compliance, Division of Air Resource Management, Florida Department of Environmental Protection (Department). The mailing address for the Office of Permitting and Compliance is 2600 Blair Stone Road (MS #5505), Tallahassee, Florida 32399-2400.
- 2. <u>Compliance Authority</u>: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Compliance Authority, the Environmental Protection Commission of Hillsborough County (EPCHC). The Compliance Authority's mailing address is:

Environmental Protection Commission Hillsborough County 3629 Queen Palm Drive Tampa, Florida 33619 Telephone: 813/627-2600, Fax: 813/627-2660

- 3. <u>Appendices</u>: The following Appendices are attached as a part of this permit and the permittee must comply with the requirements of the appendices:
  - a. Appendix CC Common Conditions;
  - b. Appendix CF Citation Formats and Glossary of Common Terms; and
  - c. Appendix GC General Conditions.
- 4. <u>Applicable Regulations, Forms and Application Procedures</u>: 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. <u>New or Additional Conditions</u>: 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. <u>Modifications</u>: No emissions unit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]
- 7. <u>Title V Permit</u>: This permit authorizes specific modifications and/or new construction on the affected emissions units as well as initial operation to determine compliance with conditions of this permit. A Title V operation permit is required for regular operation of the permitted emissions units. The permittee shall apply for a Title V operation permit at least 90 days prior to expiration of this permit. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the appropriate Permitting Authority. [Rules 62-4.030, 62-4.050, 62-4.220, and Chapter 62-213, F.A.C.]
- 8. <u>Objectionable Odors Prohibited</u>: No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor. [Rule 62-296.320(2), F.A.C.]

{Note: An objectionable odor is defined in Rule 62-210.200(Definitions), F.A.C., as any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance.}

9. <u>Unconfined Emissions of Particulate Matter</u>: No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity, including vehicular movement; transportation of materials; construction, alteration, demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions. Any permit issued to a

facility with emissions of unconfined particulate matter shall specify the reasonable precautions to be taken by that facility to control the emissions of unconfined particulate matter. General reasonable precautions include the following: a. Paving and maintenance of roads, parking areas and yards; b. Application of water or chemicals to control emissions from such activities as demolition of buildings, grading roads, construction, and land clearing; c. Application of asphalt, water, oil, chemicals or other dust suppressants to unpaved roads, yards, open stock piles and similar activities; d. Removal of particulate matter from roads and other paved areas under the control of the owner or operator of the facility to prevent re-entrainment, and from buildings or work areas to prevent particulates from becoming airborne; e. Landscaping or planting of vegetation; f. Use of hoods, fans, filters, and similar equipment to contain, capture and/or vent particulate matter; g. Confining abrasive blasting where possible; and h. Enclosure or covering of conveyor systems. [Rule 62-296.320(4)(c), F.A.C.]

# PREVIOUS APPLICABLE REQUIREMENTS

10. <u>Effect on Other Permits</u>: The conditions of this permit supplement all previously issued air construction and operation permits for these emissions units. Unless otherwise specified, these conditions are in addition to all other applicable permit conditions, rules and regulations. [Rule 62-4.070(1) & (3), Reasonable Assurance, F.A.C.]

#### A. SAP Nos. 7, 8 and 9 (EU Nos. 004, 005 and 006)

This subsection of the permit addresses the following emission units:

EU No.	Brief Description
004	No. 7 Sulfuric Acid Plant
005	No. 8 Sulfuric Acid Plant
006	No. 9 Sulfuric Acid Plant

*Descriptions*: Sulfuric Acid Plants (SAPs) Nos. 7, 8 and 9 have a design capacity of 3,200 tons per day (TPD), 2,700 TPD, and 3,400 TPD of 100% sulfuric acid, respectively. Each SAP recovers a portion of the waste heat (steam) for process use and to generate electricity. Waste heat recovery reduces plume visibility. There are two electrical generators at each SAP, rated at 35 megawatts (MW) and 36 MW for a total of 71 MW. These plants are sulfur burning, double-conversion, and double-absorption plants based on the Leonard-Monsanto design. Sulfur is burned with dried atmospheric oxygen to produce sulfur dioxide (SO<sub>2</sub>). The sulfur dioxide is catalytically oxidized to sulfur trioxide (SO<sub>3</sub>) over a catalyst bed. The sulfur trioxide is then absorbed in sulfuric acid. The remaining sulfur dioxide, not previously oxidized, is passed over a final converter bed of catalyst and the sulfur trioxide produced is then absorbed in sulfuric acid. SAP Nos. 7, 8 and 9 began operating in 1961, 1965 and 1974, respectively.

*Air Pollution Control Systems and Measures*: The control of  $SO_2$  emissions is primarily by the process itself. Currently, a double-conversion, double-absorption plant efficiently converts  $SO_2$  to  $SO_3$  then  $SO_3$  reacts in a mixture of water and sulfuric acid to produce sulfuric acid. In a double-absorption system, the conversion efficiency from  $SO_2$  to  $SO_3$  is at least 99.7%. All three plants currently use vanadium and cesium catalysts in the converters.

*Monitors*: Each SAP is equipped with an existing  $SO_2$  continuous emissions monitoring system (CEMS). The  $SO_2$  CEMS are required by the Standards of Performance for New Stationary Sources (NSPS).

*Stack Parameters*: Emissions not absorbed by each double absorption system are currently vented through 150foot tall stack for each SAP. The stack exhaust gas characteristics for SAP Nos. 7, 8 and 9 are, respectively: exhaust gas temperatures of 170° F, 150° F and 152 °F; exhaust gas flow rates of 122,000, 105,000 and 149,000 actual cubic feet per minute and stack diameters of 7.5, 8.0 and 9.0 feet.

{*Permitting notes: The SAPs are currently regulated under NSPS 40 CFR 60, Subpart H, Standards of Performance for Sulfuric Acid Plants, adopted and incorporated by reference in Rule 62-204.800(7)(b)10., F.A.C.; Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD), PSD-FL-209 (AC29-241660) - 1<sup>st</sup> BACT for SAP Nos. 8 and 9, PSD-FL-250 (0570008-025-AC) - 1<sup>st</sup> BACT for SAP No. 7, PSD-FL-315 (0570008-036-AC) - 2<sup>nd</sup>BACT for SAP Nos. 8 and 9; Rule 62-296.402, F.A.C., Sulfuric Acid Plants; and Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards.}* 

#### **Physical Changes**

- 1. <u>Stack Height Increase</u>: The SAP Nos. 7, 8 and 9 all have stacks that are currently 150 feet high, with diameters of 7.5, 8.0 and 9.0 feet, respectively. In accordance with the work schedule in **Condition 3** of this subsection, all three stack heights shall be increased to a height not less than 65 meters (213.25 feet), with the discharge diameters remaining essentially the same or less at the exhaust point (same or better exhaust characteristics for dispersion). Within 45 days of commencing operation with the increased stack heights, the permittee shall notify the Division and the Compliance Authority that the work is complete and provide the final stack dimensions and design. [Rules 62-4.070(1) and (3) and 62-4.080, F.A.C.; and SO<sub>2</sub> Attainment SIP]
- 2. <u>Converter Catalyst</u>: All three SAPs are double-absorption plants with a four catalyst bed converter and waste heat boiler, cold and hot pass heat exchangers, economizers, and heat recovery systems. In accordance with the work schedule specified in **Condition 3** of this subsection, the permittee shall change/augment the catalyst to comply with the SO<sub>2</sub> emissions caps specified in **Conditions 4, 5, and 6** of this subsection. The permittee

### A. SAP Nos. 7, 8 and 9 (EU Nos. 004, 005 and 006)

SAP capacities will remain unchanged; the purpose of the catalyst work is to reduce  $SO_2$  emissions and ambient impacts. Within 45 days of commencing operation following the turnaround (including catalyst installation and arrangement for each SAP), the permittee shall provide the following information to the Division and the Compliance Authority: the type of catalyst; the amount of catalyst, the catalyst arrangement within the convertor; and the initial expected  $SO_2$  emissions rate in "Ib/ton of 100% sulfuric acid produced" to be achieved by the catalyst formulation. [Rules 62-4.070(1) and (3) and 62-4.080, F.A.C.; and  $SO_2$  Attainment SIP]

3. <u>Work Schedule</u>: The permittee shall conduct the required work in accordance with the following schedule, which is based on the facility's planned turnarounds.

Date Completed	SAP	SAP Project Work - Activity
November 2014	SAP No. 9 (EU No. 006)	Catalyst change/augmentation
November 2015	SAP No. 8 (EU No. 005)	Catalyst change/augmentation
		Increase stack height to a minimum of 213.25 feet
November 2016	SAP No. 7 (EU No. 004)	Catalyst change/augmentation
		Increase stack height to a minimum of 213.25 feet
November 2017	SAP No. 9 (EU No. 006)	Increase stack height to a minimum of 213.25 feet

Prudent planning will allow the permittee to conduct the catalyst changes/augmentation by the deadlines specified above. With regard to the stack height increases, the permittee shall notify the Department as soon as possible regarding any issues with the design, materials, labor, etc. that would cause substantive delays in meeting the given deadline. The Department may approve alternative deadlines for the stack height increases. [Rules 62-4.070(1) and (3) and 62-4.080, F.A.C.; SO<sub>2</sub> Attainment SIP]

# SO<sub>2</sub> Emission Standards and Caps for SAPs

- 4. <u>Individual SAP Emissions Standards</u>: As determined by existing CEMS data, each SAP shall continue to comply with the following individual emissions standards, which are enforceable standards that allowed these units to avoid Rule 62-296.340(5)(c), F.A.C. (BART):
  - SAP No. 7: 400 lb SO<sub>2</sub>/hour, 24-hour block average (midnight to midnight).
  - SAP No. 8: 315 lb SO<sub>2</sub>/hour, 24-hour block average (midnight to midnight).
  - SAP No. 9: 425 lb SO<sub>2</sub>/hour, 24-hour block average (midnight to midnight).

These emissions standards apply at all times including periods when two or three SAPs are in operation. [Rule 62-296.340(5)(c), F.A.C. and Permit No. 0570008-061-AC to avoid BART; and SO<sub>2</sub> Attainment SIP]

- 5. <u>Emission Cap when Two SAPs are Operating</u>: Effective December 15, 2016, when any two SAPs operate within a 24-hour block averaging period and the third SAP is not in operation, the following SO<sub>2</sub> emissions cap also applies: 550 lb SO<sub>2</sub>/hour, 24-hour block average (6:00 am to 6:00 am). Note that the individual emissions standards in **Condition 4** of this subsection remain in effect. *{Permitting Note: This new emissions cap reduces SO*<sub>2</sub> *emissions and ambient impacts in and around the SO*<sub>2</sub> *non-attainment area in Hillsborough County.* [Rules 62-4.070(1) and (3) and 62-4.080, F.A.C.; and SO<sub>2</sub> Attainment SIP]
- 6. Emission Caps when Three SAPs are Operating: Effective December 15, 2016, when all three SAPs are in operation within the same 24-hour block averaging period, the following SO<sub>2</sub> emission cap also applies: 575 lb SO<sub>2</sub>/hour, 24-hour block average (6:00 am to 6:00 am). Note that the individual emissions standards in Condition 4 and the emissions cap for two operating SAPs in Condition 5 of this subsection remain in effect. {*Permitting Note: This new emissions cap reduces SO<sub>2</sub> emissions and ambient impacts in and around the SO<sub>2</sub> non-attainment area in Hillsborough County.* [Rules 62-4.070(1) and (3) and 62-4.080, F.A.C.; and SO<sub>2</sub> Attainment SIP]

### A. SAP Nos. 7, 8 and 9 (EU Nos. 004, 005 and 006)

7. <u>Previous SO<sub>2</sub> Emission Limits</u>: These new SO<sub>2</sub> limits and caps are in addition to previous permit limits. The SO<sub>2</sub> emissions standards and caps specified in this permit cannot vary or waive any SO<sub>2</sub> emissions standards related to any previous NSPS, NESHAP, maximum achievable control technology (MACT), best available control technology (BACT), prevention of significant deterioration (PSD), state implementation plan (SIP) requirements, or any previously issued air construction permit requirements. [Rules 62-4.070(1) and (3) and 62-4.080, F.A.C.; and SO<sub>2</sub> Attainment SIP]

## **Compliance Demonstration**

- 8. <u>Continuous Compliance Demonstration</u>: The permittee shall demonstrate continuous compliance with the SO<sub>2</sub> emissions standards and caps established in **Specific Conditions 4, 5, and 6** of this subsection based on data collected by the existing SO<sub>2</sub> CEMS. The emissions standards and caps apply during all periods of operation including startup and shutdown. [Rules 62-4.070(3) and 62-4.080, F.A.C.; and SO<sub>2</sub> Attainment SIP]
- 9. <u>SO<sub>2</sub> CEMS Requirements</u>: The existing SO<sub>2</sub> CEMS shall comply with the quality assurance and quality control requirements specified in the most recent Title V air operation permit. [Rules 62-4.070(1) and (3) and 62-4.080, F.A.C.; and SO<sub>2</sub> Attainment SIP]
- 10. <u>Semi-Annual Progress Reports</u>: The permittee shall provide semiannual progress reports for the six-month periods ending June 30<sup>th</sup> and December 31<sup>st</sup> of each year on the status of the physical and operational changes required by the this permit. Reports shall be submitted to the Division and Compliance Authority within 30 days following the reporting period. The first progress report is due by January 30, 2015 and the last progress report is due by January 30, 2018. [Rules 62-4.070(1) and (3) and 62-4.080, F.A.C.; and SO<sub>2</sub> Attainment SIP]

## **Ongoing Compliance and Test Reports**

- 11. <u>Semiannual SO<sub>2</sub> CEMS Data Reports</u>: The permittee shall submit semiannual emissions reports for the sixmonth periods ending June 30<sup>th</sup> and December 31<sup>st</sup> of each year summarizing the SO<sub>2</sub> data and demonstrating compliance with the SO<sub>2</sub> emissions standards and caps specified in **Specific Conditions 4, 5, and 6** of this subsection. Reports shall be submitted within 30 days following the six-month reporting period. The first report is due by July 30, 2018. Each report shall summarize each 24-hour block average SO<sub>2</sub> emissions rates showing compliance with the standards and caps during the reporting period along with any background information necessary to explain the emissions. [Rules 62-4.070(1) and (3) and 62-4.080, F.A.C.; and SO<sub>2</sub> Attainment SIP]
- 12. <u>Emissions Exceedance Reporting</u>: Within one business day of occurrence, the permittee shall notify the Compliance Authority of any exceedance of the SO<sub>2</sub> emissions standards and/or caps. Within 15 days of occurrence, the permittee shall submit a report to the Compliance Authority detailing the exceedance, identifying the likely cause, describing any corrective actions taken, and noting when the unit was returned to compliance. This reporting requirement is effective December 15, 2016. [Rules 62-4.070(1) and (3) and 62-4.080, F.A.C.; and SO<sub>2</sub> Attainment SIP]

#### **B.** Sulfuric Acid, Ammonium Phosphate, and Granulation Plants

This subsection of the permit addresses the following emission units:

EU No.	Brief Description
004	No. 7 Sulfuric Acid Plant
005	No. 8 Sulfuric Acid Plant
006	No. 9 Sulfuric Acid Plant
007	No. 6 AP Plant
055	No. 5 Granulation Plant

## Fuel Oil Limitation

1. <u>Elimination of Fuel Oil Use</u>: Effective July 1, 2015, the Mosaic Riverview facility shall cease firing fuel oil in Emission Units 004, 005, 006, 007 and 055 except during periods of natural gas curtailment or disruption. [Rules 62-4.070(1) and (3) and 62-4.080, F.A.C.; and SO<sub>2</sub> Attainment SIP]



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# **ENVIRONMENTAL PROTECTION**

BOB MARTINEZ CENTER 2600 BLAIR STONE ROAD TALLAHASSEE, FLORIDA 32399-2400 CARLOS LOPEZ-CANTERA LT. GOVERNOR

JONATHAN P. STEVERSON SECRETARY

Permit No. 0570008-080-AC Permit Expires: August 1, 2018 Riverview Facility SO<sub>2</sub> Emissions Reduction Project Hillsborough County

PERMITTEE

Riverview Facility Mosaic Fertilizer, LLC 13830 Circa Crossing Drive Lithia, Florida 33547

Authorized Representative: Mr. Robert Fredere, Plant Manager

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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.

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*for:* Jeffery F. Koerner, Program Administrator Office of Permitting and Compliance Division of Air Resource Management

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- Ms. Kelley Boatwright, DEP SWD: kelley.boatwright@dep.state.fl.us
- Ms. Heather Ceron, U.S. EPA Region 4: ceron.heather@epa.gov
- Ms. Diana Lee, P.E., HCEPC: lee@epchc.org
- Mr. Thomas G. Rogers, DEP OBP: tom.rogers@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.

#### FACILITY DESCRIPTION

This existing Mosaic Riverview facility consists of several industrial processes that convert insoluble rock containing phosphorus ore into a soluble form suitable for agricultural use. The processes consist of one phosphoric acid plant (two trains), two ammoniated phosphate (AP) plants, three sulfuric acid plants (SAP), one material handling system, one auxiliary boiler, two animal feed plants, a molten sulfur storage and handling system and emergency compression ignition reciprocating internal combustion engines. This facility consists of the emissions units shown below. The emission units affected by this permitting action are highlighted in yellow.

LIST OF	EMISSION UNITS.
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EU No.	Brief Description	
Regulated Emissions Units		
004	No. 7 Sulfuric Acid Plant	
005	No. 8 Sulfuric Acid Plant	
006	No. 9 Sulfuric Acid Plant	
007	No. 6 AP Plant	
051	Conveyor No. 9 Transfer Points and Railcar Unloading	
052	Conveyor No. 9 to Shipping Belt Conveyor	
053	Vessel Loading Operation	
055	No. 5 Granulation Plant	
058	Conveyor No. 6 to Conveyor No. 7	
059	Conveyor No. 7 to Conveyor No. 8	
060	Screening Tower and Conveyor No. 8 to Conveyor No. 9	
061	East Vessel Loading Facility - Shiphold/Chokefeed	
063	Molten Sulfur Storage and Handling System – Tank #1, 2 and 3	
066	Molten Sulfur Storage and Handling System Pit #7	
067	Molten Sulfur Storage and Handling System Pit #8	
068	Molten Sulfur Storage and Handling System Pit #9	
073	Phosphoric Acid Production Facility	
074	Molten Sulfur Storage and Handling System Truck Loading Station	
075	AP Storage Building Nos. 2, 4, 5 & 6	
076	Loadout between Buildings 2 & 4	
077	Loadout adjacent to Building 6	
078	Animal Feed Ingredient (AFI) Plant No. 1	
079	Diatomaceous Earth (DE) Silo	
080	Limestone Silo	
081	Animal Feed Plant (AFI) Loadout System	
103	Animal Feed Ingredient (AFI) Plant No. 2	
104	Phosphogypsum Stack North (No. 1)	
108	Phosphogypsum Stack South (No 2.)	

#### SECTION 1. GENERAL INFORMATION

EU No.	Brief Description
109	Clarifier and Storage Tanks
111	Existing Emergency Stationary RICE < or equal to 500 HP
112	Auxiliary Steam Boiler
113	Non-Emergency CI ICE
	Miscellaneous Emissions Units and Activities
105	<ul> <li>Facility-Wide Fugitive Emissions:</li> <li>Sulfur dioxides (SO<sub>2</sub>), sulfur trioxides (SO<sub>3</sub>), sulfuric acid mist (SAM) emissions from the <u>7, 8</u> <u>&amp; 9 Sulfuric Acid Plants</u></li> <li>Fluoride emissions from the <u>Phosphoric Acid Plant</u></li> <li>Fluoride, ammonia (NH<sub>3</sub>), particulate matter (PM) emissions from the <u>Nos. 5 &amp; 6 Granulation</u> <u>Plants</u></li> <li>Hydrogen Fluoride emissions from the <u>Phosphogypsum Stacks</u> and <u>Cooling Ponds</u></li> <li><i>Note: For this emissions unit, Annual Operation Report (AOR) emissions estimates are required</i> <i>only for the Hydrogen Fluoride emissions from the Phosphogypsum Stacks and Cooling Ponds.</i></li> </ul>

## PROPOSED PROJECT

The purpose of the project is to reduce  $SO_2$  emissions and ambient impacts from the facility. Specifically, the permit requires:

- Elimination of the use of oil at the plant except during periods of natural gas curtailment or disruption.
- Changing/augmenting the catalysts in the converters in SAP Nos. 7, 8 and 9, which will lower SO<sub>2</sub> emissions while not increasing sulfuric acid mist (SAM) emissions. Note that the existing permitted capacities of the plants will remain the unchanged.
- Increasing the stack height of each SAP to no lower than 65 meters (213.25 feet) which is equivalent to approximately a 60-foot increase per stack.
- Comply with specific SO<sub>2</sub> emissions standards and caps based on a 24-hour block average as determined by CEMS data.

# FACILITY REGULATORY CLASSIFICATION

- The existing facility is a major source of HAP.
- The existing facility is a Title V major source of air pollution in accordance with Chapter 62-213, F.A.C.
- The existing facility is a major stationary source in accordance with Rule 62-212.400 (PSD), F.A.C.
- This facility does not operate units subject to the acid rain provisions of the Clean Air Act (CAA)
- The facility operates units that are subject to the New Source Performance Standards (NSPS) at 40 Code of Federal Regulations, Part 60 (40 CFR 60), and the National Emissions Standards for Hazardous Air Pollutants (NESHAP) at 40 CFR 63.

- <u>Permitting Authority</u>: The permitting authority for this project is the Office of Permitting and Compliance, Division of Air Resource Management, Florida Department of Environmental Protection (Department). The mailing address for the Office of Permitting and Compliance is 2600 Blair Stone Road (MS #5505), Tallahassee, Florida 32399-2400.
- 2. <u>Compliance Authority</u>: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Compliance Authority, the Environmental Protection Commission of Hillsborough County (EPCHC). The Compliance Authority's mailing address is:

Environmental Protection Commission Hillsborough County 3629 Queen Palm Drive Tampa, Florida 33619 Telephone: 813/627-2600, Fax: 813/627-2660

- 3. <u>Appendices</u>: The following Appendices are attached as a part of this permit and the permittee must comply with the requirements of the appendices:
  - a. Appendix CC Common Conditions;
  - b. Appendix CF Citation Formats and Glossary of Common Terms; and
  - c. Appendix GC General Conditions.
- 4. <u>Applicable Regulations, Forms and Application Procedures</u>: 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. <u>New or Additional Conditions</u>: 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. <u>Modifications</u>: No emissions unit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]
- 7. <u>Title V Permit</u>: This permit authorizes specific modifications and/or new construction on the affected emissions units as well as initial operation to determine compliance with conditions of this permit. A Title V operation permit is required for regular operation of the permitted emissions units. The permittee shall apply for a Title V operation permit at least 90 days prior to expiration of this permit. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the appropriate Permitting Authority. [Rules 62-4.030, 62-4.050, 62-4.220, and Chapter 62-213, F.A.C.]
- 8. <u>Objectionable Odors Prohibited</u>: No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor. [Rule 62-296.320(2), F.A.C.]

{Note: An objectionable odor is defined in Rule 62-210.200(Definitions), F.A.C., as any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance.}

9. <u>Unconfined Emissions of Particulate Matter</u>: No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity, including vehicular movement; transportation of materials; construction, alteration, demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions. Any permit issued to a

facility with emissions of unconfined particulate matter shall specify the reasonable precautions to be taken by that facility to control the emissions of unconfined particulate matter. General reasonable precautions include the following: a. Paving and maintenance of roads, parking areas and yards; b. Application of water or chemicals to control emissions from such activities as demolition of buildings, grading roads, construction, and land clearing; c. Application of asphalt, water, oil, chemicals or other dust suppressants to unpaved roads, yards, open stock piles and similar activities; d. Removal of particulate matter from roads and other paved areas under the control of the owner or operator of the facility to prevent re-entrainment, and from buildings or work areas to prevent particulates from becoming airborne; e. Landscaping or planting of vegetation; f. Use of hoods, fans, filters, and similar equipment to contain, capture and/or vent particulate matter; g. Confining abrasive blasting where possible; and h. Enclosure or covering of conveyor systems. [Rule 62-296.320(4)(c), F.A.C.]

# PREVIOUS APPLICABLE REQUIREMENTS

Effect on Other Permits: The conditions of this permit supplement all previously issued air construction and operation permits for these emissions units. Unless otherwise specified, these conditions are in addition to all other applicable permit conditions, rules and regulations. [Rule 62-4.070(1) & (3), Reasonable Assurance, F.A.C.]

#### A. SAP Nos. 7, 8 and 9 (EU Nos. 004, 005 and 006)

This subsection of the permit addresses the following emission units:

EU No.	Brief Description
004	No. 7 Sulfuric Acid Plant
005	No. 8 Sulfuric Acid Plant
006	No. 9 Sulfuric Acid Plant

*Descriptions*: Sulfuric Acid Plants (SAPs) Nos. 7, 8 and 9 have a design capacity of 3,200 tons per day (TPD), 2,700 TPD, and 3,400 TPD of 100% sulfuric acid, respectively. Each SAP recovers a portion of the waste heat (steam) for process use and to generate electricity. Waste heat recovery reduces plume visibility. There are two electrical generators at each SAP, rated at 35 megawatts (MW) and 36 MW for a total of 71 MW. These plants are sulfur burning, double-conversion, and double-absorption plants based on the Leonard-Monsanto design. Sulfur is burned with dried atmospheric oxygen to produce sulfur dioxide (SO<sub>2</sub>). The sulfur dioxide is catalytically oxidized to sulfur trioxide (SO<sub>3</sub>) over a catalyst bed. The sulfur trioxide is then absorbed in sulfuric acid. The remaining sulfur dioxide, not previously oxidized, is passed over a final converter bed of catalyst and the sulfur trioxide produced is then absorbed in sulfuric acid. SAP Nos. 7, 8 and 9 began operating in 1961, 1965 and 1974, respectively.

*Air Pollution Control Systems and Measures*: The control of  $SO_2$  emissions is primarily by the process itself. Currently, a double-conversion, double-absorption plant efficiently converts  $SO_2$  to  $SO_3$  then  $SO_3$  reacts in a mixture of water and sulfuric acid to produce sulfuric acid. In a double-absorption system, the conversion efficiency from  $SO_2$  to  $SO_3$  is at least 99.7%. All three plants currently use vanadium and cesium catalysts in the converters.

*Monitors*: Each SAP is equipped with an existing  $SO_2$  continuous emissions monitoring system (CEMS). The  $SO_2$  CEMS are required by the Standards of Performance for New Stationary Sources (NSPS).

*Stack Parameters*: Emissions not absorbed by each double absorption system are currently vented through 150foot tall stack for each SAP. The stack exhaust gas characteristics for SAP Nos. 7, 8 and 9 are, respectively: exhaust gas temperatures of 170° F, 150° F and 152 °F; exhaust gas flow rates of 122,000, 105,000 and 149,000 actual cubic feet per minute and stack diameters of 7.5, 8.0 and 9.0 feet.

{*Permitting notes: The SAPs are currently regulated under NSPS 40 CFR 60, Subpart H, Standards of Performance for Sulfuric Acid Plants, adopted and incorporated by reference in Rule 62-204.800(7)(b)10., F.A.C.; Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD), PSD-FL-209 (AC29-241660) - 1<sup>st</sup> BACT for SAP Nos. 8 and 9, PSD-FL-250 (0570008-025-AC) - 1<sup>st</sup> BACT for SAP No. 7, PSD-FL-315 (0570008-036-AC) - 2<sup>nd</sup>BACT for SAP Nos. 8 and 9; Rule 62-296.402, F.A.C., Sulfuric Acid Plants; and Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards.}* 

# **Physical Changes**

- 1. <u>Stack Height Increase</u>: The SAP Nos. 7, 8 and 9 all have stacks that are currently 150 feet high, with diameters of 7.5, 8.0 and 9.0 feet, respectively. In accordance with the work schedule in **Condition 3** of this subsection, all three stack heights shall be increased to a height not less than 65 meters (213.25 feet), with the discharge diameters remaining essentially the same or less at the exhaust point (same or better exhaust characteristics for dispersion). Within 45 days of commencing operation with the increased stack heights, the permittee shall notify the Division and the Compliance Authority that the work is complete and provide the final stack dimensions and design. [Rules 62-4.070(1) and (3) and 62-4.080, F.A.C.; and SO<sub>2</sub> Attainment SIP]
- 2. <u>Converter Catalyst</u>: All three SAPs are double-absorption plants with a four catalyst bed converter and waste heat boiler, cold and hot pass heat exchangers, economizers, and heat recovery systems. In accordance with the work schedule specified in **Condition 3** of this subsection, the permittee shall change/augment the catalyst to comply with the SO<sub>2</sub> emissions caps specified in **Conditions 4, 5, and 6** of this subsection. The permittee

### A. SAP Nos. 7, 8 and 9 (EU Nos. 004, 005 and 006)

SAP capacities will remain unchanged; the purpose of the catalyst work is to reduce  $SO_2$  emissions and ambient impacts. Within 45 days of commencing operation following the turnaround (including catalyst installation and arrangement for each SAP), the permittee shall provide the following information to the Division and the Compliance Authority: the type of catalyst; the amount of catalyst, the catalyst arrangement within the convertor; and the initial expected  $SO_2$  emissions rate in "Ib/ton of 100% sulfuric acid produced" to be achieved by the catalyst formulation. [Rules 62-4.070(1) and (3) and 62-4.080, F.A.C.; and  $SO_2$  Attainment SIP]

3. <u>Work Schedule</u>: The permittee shall conduct the required work in accordance with the following schedule, which is based on the facility's planned turnarounds.

Date Completed	SAP	SAP Project Work - Activity
November 2014	SAP No. 9 (EU No. 006)	Catalyst change/augmentation
November 2015	SAP No. 8 (EU No. 005)	Catalyst change/augmentation
		Increase stack height to a minimum of 213.25 feet
November 2016	SAP No. 7 (EU No. 004)	Catalyst change/augmentation
		Increase stack height to a minimum of 213.25 feet
November 2017	SAP No. 9 (EU No. 006)	Increase stack height to a minimum of 213.25 feet

Prudent planning will allow the permittee to conduct the catalyst changes/augmentation by the deadlines specified above. With regard to the stack height increases, the permittee shall notify the Department as soon as possible regarding any issues with the design, materials, labor, etc. that would cause substantive delays in meeting the given deadline. The Department may approve alternative deadlines for the stack height increases. [Rules 62-4.070(1) and (3) and 62-4.080, F.A.C.; SO<sub>2</sub> Attainment SIP]

# SO<sub>2</sub> Emission Standards and Caps for SAPs

- 4. <u>Individual SAP Emissions Standards</u>: As determined by existing CEMS data, each SAP shall continue to comply with the following individual emissions standards, which are enforceable standards that allowed these units to avoid Rule 62-296.340(5)(c), F.A.C. (BART):
  - SAP No. 7: 400 lb SO<sub>2</sub>/hour, 24-hour block average (midnight to midnight).
  - SAP No. 8: 315 lb SO<sub>2</sub>/hour, 24-hour block average (midnight to midnight).
  - SAP No. 9: 425 lb SO<sub>2</sub>/hour, 24-hour block average (midnight to midnight).

These emissions standards apply at all times including periods when two or three SAPs are in operation. [Rule 62-296.340(5)(c), F.A.C. and Permit No. 0570008-061-AC to avoid BART; and SO<sub>2</sub> Attainment SIP]

- 5. Emission Cap when Two SAPs are Operating: Effective December 15, 2016, when any two SAPs operate within a 24-hour block averaging period and the third SAP is not in operation, the following SO<sub>2</sub> emissions cap also applies: 550 lb SO<sub>2</sub>/hour, 24-hour block average (6:00 am to 6:00 am). Note that the individual emissions standards in Condition 4 of this subsection remain in effect. *{Permitting Note: This new emissions cap reduces SO<sub>2</sub> emissions and ambient impacts in and around the SO<sub>2</sub> non-attainment area in Hillsborough County.* [Rules 62-4.070(1) and (3) and 62-4.080, F.A.C.; and SO<sub>2</sub> Attainment SIP]
- 6. Emission Caps when Three SAPs are Operating: Effective December 15, 2016, when all three SAPs are in operation within the same 24-hour block averaging period, the following SO<sub>2</sub> emission cap also applies: 575 lb SO<sub>2</sub>/hour, 24-hour block average (6:00 am to 6:00 am). Note that the individual emissions standards in Condition 4 and the emissions cap for two operating SAPs in Condition 5 of this subsection remain in effect. {*Permitting Note: This new emissions cap reduces SO<sub>2</sub> emissions and ambient impacts in and around the SO<sub>2</sub> non-attainment area in Hillsborough County.* [Rules 62-4.070(1) and (3) and 62-4.080, F.A.C.; and SO<sub>2</sub> Attainment SIP]

### A. SAP Nos. 7, 8 and 9 (EU Nos. 004, 005 and 006)

7. <u>Previous SO<sub>2</sub> Emission Limits</u>: These new SO<sub>2</sub> limits and caps are in addition to previous permit limits. The SO<sub>2</sub> emissions standards and caps specified in this permit cannot vary or waive any SO<sub>2</sub> emissions standards related to any previous NSPS, NESHAP, maximum achievable control technology (MACT), best available control technology (BACT), prevention of significant deterioration (PSD), state implementation plan (SIP) requirements, or any previously issued air construction permit requirements. [Rules 62-4.070(1) and (3) and 62-4.080, F.A.C.; and SO<sub>2</sub> Attainment SIP]

## **Compliance Demonstration**

- 8. <u>Continuous Compliance Demonstration</u>: The permittee shall demonstrate continuous compliance with the SO<sub>2</sub> emissions standards and caps established in **Specific Conditions 4, 5, and 6** of this subsection based on data collected by the existing SO<sub>2</sub> CEMS. The emissions standards and caps apply during all periods of operation including startup and shutdown. [Rules 62-4.070(3) and 62-4.080, F.A.C.; and SO<sub>2</sub> Attainment SIP]
- 9. <u>SO<sub>2</sub> CEMS Requirements</u>: The existing SO<sub>2</sub> CEMS shall comply with the quality assurance and quality control requirements specified in the most recent Title V air operation permit. [Rules 62-4.070(1) and (3) and 62-4.080, F.A.C.; and SO<sub>2</sub> Attainment SIP]
- 10. <u>Semi-Annual Progress Reports</u>: The permittee shall provide semiannual progress reports for the six-month periods ending June 30<sup>th</sup> and December 31<sup>st</sup> of each year on the status of the physical and operational changes required by the this permit. Reports shall be submitted to the Division and Compliance Authority within 30 days following the reporting period. The first progress report is due by January 30, 2015 and the last progress report is due by January 30, 2018. [Rules 62-4.070(1) and (3) and 62-4.080, F.A.C.; and SO<sub>2</sub> Attainment SIP]

## **Ongoing Compliance and Test Reports**

- 11. <u>Semiannual SO<sub>2</sub> CEMS Data Reports</u>: The permittee shall submit semiannual emissions reports for the sixmonth periods ending June 30<sup>th</sup> and December 31<sup>st</sup> of each year summarizing the SO<sub>2</sub> data and demonstrating compliance with the SO<sub>2</sub> emissions standards and caps specified in **Specific Conditions 4, 5, and 6** of this subsection. Reports shall be submitted within 30 days following the six-month reporting period. The first report is due by July 30, 2018. Each report shall summarize each 24-hour block average SO<sub>2</sub> emissions rates showing compliance with the standards and caps during the reporting period along with any background information necessary to explain the emissions. [Rules 62-4.070(1) and (3) and 62-4.080, F.A.C.; and SO<sub>2</sub> Attainment SIP]
- 12. <u>Emissions Exceedance Reporting</u>: Within one business day of occurrence, the permittee shall notify the Compliance Authority of any exceedance of the SO<sub>2</sub> emissions standards and/or caps. Within 15 days of occurrence, the permittee shall submit a report to the Compliance Authority detailing the exceedance, identifying the likely cause, describing any corrective actions taken, and noting when the unit was returned to compliance. This reporting requirement is effective December 15, 2016. [Rules 62-4.070(1) and (3) and 62-4.080, F.A.C.; and SO<sub>2</sub> Attainment SIP]

#### **B.** Sulfuric Acid, Ammonium Phosphate, and Granulation Plants

This subsection of the permit addresses the following emission units:

EU No.	Brief Description
004	No. 7 Sulfuric Acid Plant
005	No. 8 Sulfuric Acid Plant
006	No. 9 Sulfuric Acid Plant
007	No. 6 AP Plant
055	No. 5 Granulation Plant

# **Fuel Oil Limitation**

1. <u>Elimination of Fuel Oil Use</u>: Effective July 1, 2015, the Mosaic Riverview facility shall cease firing fuel oil in Emission Units 004, 005, 006, 007 and 055 except during periods of natural gas curtailment or disruption. [Rules 62-4.070(1) and (3) and 62-4.080, F.A.C.; and SO<sub>2</sub> Attainment SIP]

## PERMITTEE

Riverview Facility Mosaic Fertilizer, LLC 13830 Circa Crossing Drive Lithia, Florida 33547

## PERMITTING AUTHORITY

Florida Department of Environmental Protection (Department) Division of Air Resource Management Office of Permitting and Compliance 2600 Blair Stone Road, MS #5505 Tallahassee, Florida 32399-2400

#### PROJECT

Air Permit No. 0570008-080-AC Sulfur Dioxide (SO<sub>2</sub>) Emissions Reduction Project Mosaic Riverview Facility

This is the final air construction permit for the  $SO_2$  Emissions Reduction Project at the Riverview Facility, which includes physical and operational changes to reduce  $SO_2$  emissions and ambient impacts from the facility.

## NOTICE AND PUBLICATION

The Department distributed a draft minor air construction permit package on November 26, 2014. The applicant published the Public Notice in the <u>Tampa Tribune</u> on December 5, 2014. The Department received the proof of publication on December 9, 2014. No requests for administrative hearings or requests for extensions of time to file a petition for administrative hearing were received.

#### COMMENTS

No comments on the Draft Permit were received from the Local Air Program, the EPA Region 4 Office, or the applicant. Comments were received from Ms. Laureen Galeoto, Esq. on December 19, 2014. These comments can be grouped into five categories and are summarized below along with the Department's response.

1. <u>Comment</u>: Ms. Galeoto states that the applicant has not provided reasonable assurance that operation of the equipment as modified by the permit "... will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 92-204, 62-210, 62-296 and 62-297, F.A.C." Commenter also makes various comments regarding the sufficiency of modeling information provided by the applicant.

<u>Response</u>: Modeling by the applicant is not required for this permitting action, which is authorizing a pollution reduction project at the Mosaic Riverview facility. Nor does the Department believe that modeling by the applicant is necessary for this pollution reduction project. Further, any modeling results or information provided by the applicant were not relied upon by the Department when undertaking this permitting action.

This project, which is an SO<sub>2</sub> emissions reductions project, requires physical and operational changes to existing equipment to reduce SO<sub>2</sub> emissions, so overall air quality will improve and ambient SO<sub>2</sub> impacts will be reduced in the area. The Department's air rule, subparagraph 62-210.300(1)(b), F.A.C. states that, "Except as provided in Rule 62-212.500, F.A.C., the Department shall not permit the construction or modification of any emissions unit or facility that would cause or contribute to a violation of any ambient air quality standards." The reference to Rule 62-212.500, F.A.C. is for projects that would propose to construct new units or modify existing units such that the emissions would significantly increase and subject the project to non-attainment area new source review. For this project, the applicant has proposed a SO<sub>2</sub> pollution control project that will reduce emissions and result in improve local air quality. Specifically, SO<sub>2</sub> reductions will be achieved by:

- a. Except for natural gas curtailments, no longer firing fuel oil (which contains sulfur) in the three sulfuric acid plants (SAP), the ammonium phosphate plant, and the granulation plant (effective July 1, 2015).
- b. During regularly scheduled SAP outages through 2016, replacing and augmenting the existing catalyst with improved formulations and configurations to reduce actual SO<sub>2</sub> emissions.
- c. Complying with new SO<sub>2</sub> emissions caps when more than one SAP is in operation. For the case when two SAPs operate, the new SO<sub>2</sub> emissions cap is a reduction of 23% to 33% over the previously allowed combinations of individual emissions rates. For the case when three SAPs operate, the new SO<sub>2</sub> emissions cap is a reduction of 49% over the previously allowed combination of individual emissions rates. The SO<sub>2</sub> emissions are continuously monitored, recorded, and reported, so the reductions and compliance will be verifiable.
- 2. <u>Comment</u>: Ms. Galeoto states that there is no indication that TECO Big Bend Station is in the process of reducing its SO<sub>2</sub> emissions by permit modification or by other means.

<u>Response</u>: TECO is not a party to this permitting action. However, a draft permit package was recently issued for the TECO Big Bend facility that authorizes a SO<sub>2</sub> reduction project (Permit No. 0570039-074-AC). This draft permit package can be accessed by entering the permit number at the following link: <u>http://appprod.dep.state.fl.us/air/emission/apds/default.asp</u>.

3. <u>Comment</u>: Ms. Galeoto states that there is no nonattainment area-wide modeling or analysis provided for review.

<u>Response</u>: This project is an emissions reduction project and nonattainment modeling was not required for this specific permitting action. However, modeling addressing the nonattainment area in Hillsborough County was performed in preparation for the Department's  $SO_2$  nonattainment State Implementation Plan (SIP) submittal to EPA. This modeling is available upon request. The Department's proposed SIP will be formally transmitted to EPA for approval in the near future and will be available for public comment and review at that time.

4. <u>Comment</u>: Ms. Galeoto states that the applicant is using increased stack height as a primary mechanism to disperse its pollution and the concept of "dilution is the solution to pollution" has been rejected at the state and federal levels.

<u>Response</u>: As mentioned previously, the draft permit requires real  $SO_2$  emissions reductions in addition to increasing the stack heights of the SAPs from 150 feet (45.72 meters) to 213.25 feet (65 meters).

5. <u>Comment</u>: Ms. Galeoto states that there is no discussion or technical analysis regarding why additional "replace(ing) and augment(ing) the catalyst in each SAP converter to reduce SO<sub>2</sub> emissions" cannot be achieved to further reduce emissions without raising the stacks.

<u>Response</u>: The SAP catalyst chambers are fixed in size so the amount of catalyst that can be added to reduce emissions of SO<sub>2</sub> is constrained to a fixed limit. The applicant has proposed, and the Department has accepted, that superior catalyst formulations can be used in the SAPs and will provide actual reductions in SO<sub>2</sub> emissions from the facility. This reduction in SO<sub>2</sub> emissions, in combination with increasing SAP stack heights, will improve air quality and reduce ambient SO<sub>2</sub> impacts in the area.

# CORRECTIONS

Condition 4 in Section 3A of the draft permit identified the individual  $SO_2$  standards for each SAP based on the Best Available Retrofit Technology (BART) as specified in Permit No. 0570008-061-AC. However, the original permit identified the 24-hour averaging period as "midnight to midnight" instead of 6:00 am to 6:00 am. This was corrected in the final permit.

#### CONCLUSION

The final action of the Department is to issue the permit with no changes.

## **SECTION 4. APPENDICES**

# CONTENTS

The following Appendices are part of this permit and the permittee must comply with the requirements of each appendix.

- Appendix CC Common Conditions
- Appendix CF Citation Formats and Glossary of Common Terms
- Appendix GC General Conditions

#### **SECTION 4. APPENDIX CC**

## **COMMON CONDITIONS**

Unless otherwise specified in the permit, the following conditions apply to all emissions units and activities at the facility.

#### EMISSIONS AND CONTROLS

- <u>Plant Operation Problems</u>: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the permittee shall notify each Compliance Authority as soon as possible, but at least within one working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; steps being taken to correct the problem and prevent future recurrence; and, where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit or the regulations. [Rule 62-4.130, F.A.C.]
- 2. <u>Circumvention</u>: The permittee shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rule 62-210.650, F.A.C.]
- 3. Excess Emissions Allowed: Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed 2 hours in any 24-hour period unless specifically authorized by the Department for longer duration. Pursuant to Rule 62-210.700(5), F.A.C., the permit subsection may specify more or less stringent requirements for periods of excess emissions. Rule 62-210-700(Excess Emissions), F.A.C., cannot vary or supersede any federal NSPS or NESHAP provision. [Rule 62-210.700(1), F.A.C.]
- 4. <u>Excess Emissions Prohibited</u>: Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]
- <u>Excess Emissions Notification</u>: In case of excess emissions resulting from malfunctions, the permittee shall notify the Compliance Authority in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]
- <u>VOC or OS Emissions</u>: No person shall store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds (VOC) or organic solvents (OS) without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department. [Rule 62-296.320(1), F.A.C.]
- Objectionable Odor Prohibited: No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An "objectionable odor" means any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance.
   [Rules 62-296.320(2) and 62-210.200(Definitions), F.A.C.]
- 8. <u>General Visible Emissions</u>: No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20% opacity. This regulation does not impose a specific testing requirement. [Rule 62-296.320(4)(b)1, F.A.C.]
- 9. <u>Unconfined Particulate Emissions</u>: No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity, including vehicular movement; transportation of materials; construction, alteration, demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions. During the construction period, unconfined particulate matter emissions shall be minimized by dust suppressing techniques such as covering and/or application of water or chemicals to the affected areas, as necessary. [Rule 62-296.320(4)(c), F.A.C.]

## **COMMON CONDITIONS**

#### **RECORDS AND REPORTS**

- <u>Records Retention</u>: All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least 5 years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department upon request. [Rule 62-213.440(1)(b)2, F.A.C.]
- 11. Emissions Computation and Reporting:
  - a. *Applicability*. This rule sets forth required methodologies to be used by the owner or operator of a facility for computing actual emissions, baseline actual emissions, and net emissions increase, as defined at Rule 62-210.200, F.A.C., and for computing emissions for purposes of the reporting requirements of subsection 62-210.370(3) and paragraph 62-212.300(1)(e), F.A.C., or of any permit condition that requires emissions be computed in accordance with this rule. This rule is not intended to establish methodologies for determining compliance with the emission limitations of any air permit.
  - b. *Computation of Emissions*. For any of the purposes set forth in subsection 62-210.370(1), F.A.C., the owner or operator of a facility shall compute emissions in accordance with the requirements set forth in this subsection.
    - (1) Basic Approach. The owner or operator shall employ, on a pollutant-specific basis, the most accurate of the approaches set forth below to compute the emissions of a pollutant from an emissions unit; provided, however, that nothing in this rule shall be construed to require installation and operation of any continuous emissions monitoring system (CEMS), continuous parameter monitoring system (CPMS), or predictive emissions monitoring system (PEMS) not otherwise required by rule or permit, nor shall anything in this rule be construed to require performance of any stack testing not otherwise required by rule or permit.
      - (a) If the emissions unit is equipped with a CEMS meeting the requirements of paragraph 62-210.370(2)(b), F.A.C., the owner or operator shall use such CEMS to compute the emissions of the pollutant, unless the owner or operator demonstrates to the department that an alternative approach is more accurate because the CEMS represents still-emerging technology.
      - (b) If a CEMS is not available or does not meet the requirements of paragraph 62-210.370(2)(b), F.A.C, but emissions of the pollutant can be computed pursuant to the mass balance methodology of paragraph 62-210.370(2)(c), F.A.C., the owner or operator shall use such methodology, unless the owner or operator demonstrates to the department that an alternative approach is more accurate.
      - (c) If a CEMS is not available or does not meet the requirements of paragraph 62-210.370(2)(b), F.A.C., and emissions cannot be computed pursuant to the mass balance methodology, the owner or operator shall use an emission factor meeting the requirements of paragraph 62-210.370(2)(d), F.A.C., unless the owner or operator demonstrates to the department that an alternative approach is more accurate.
    - (2) Continuous Emissions Monitoring System (CEMS).
      - (a) An owner or operator may use a CEMS to compute emissions of a pollutant for purposes of this rule provided:
        - 1) The CEMS complies with the applicable certification and quality assurance requirements of 40 CFR Part 60, Appendices B and F, or, for an acid rain unit, the certification and quality assurance requirements of 40 CFR Part 75, all adopted by reference at Rule 62-204.800, F.A.C.; or
        - 2) The owner or operator demonstrates that the CEMS otherwise represents the most accurate means of computing emissions for purposes of this rule.
      - (b) Stack gas volumetric flow rates used with the CEMS to compute emissions shall be obtained by the most accurate of the following methods as demonstrated by the owner or operator:

### COMMON CONDITIONS

- 1) A calibrated flowmeter that records data on a continuous basis, if available; or
- 2) The average flow rate of all valid stack tests conducted during a five-year period encompassing the period over which the emissions are being computed, provided all stack tests used shall represent the same operational and physical configuration of the unit.
- (c) The owner or operator may use CEMS data in combination with an appropriate f-factor, heat input data, and any other necessary parameters to compute emissions if such method is demonstrated by the owner or operator to be more accurate than using a stack gas volumetric flow rate as set forth at subparagraph 62-210.370(2)(b)2., F.A.C., above.
- (3) Mass Balance Calculations.
  - (a) An owner or operator may use mass balance calculations to compute emissions of a pollutant for purposes of this rule provided the owner or operator:
    - 1) Demonstrates a means of validating the content of the pollutant that is contained in or created by all materials or fuels used in or at the emissions unit; and
    - 2) Assumes that the emissions unit emits all of the pollutant that is contained in or created by any material or fuel used in or at the emissions unit if it cannot otherwise be accounted for in the process or in the capture and destruction of the pollutant by the unit's air pollution control equipment.
  - (b) Where the vendor of a raw material or fuel which is used in or at the emissions unit publishes a range of pollutant content from such material or fuel, the owner or operator shall use the highest value of the range to compute the emissions, unless the owner or operator demonstrates using site-specific data that another content within the range is more accurate.
  - (c) In the case of an emissions unit using coatings or solvents, the owner or operator shall document, through purchase receipts, records and sales receipts, the beginning and ending VOC inventories, the amount of VOC purchased during the computational period, and the amount of VOC disposed of in the liquid phase during such period.
- (4) Emission Factors.
  - a. An owner or operator may use an emission factor to compute emissions of a pollutant for purposes of this rule provided the emission factor is based on site-specific data such as stack test data, where available, unless the owner or operator demonstrates to the department that an alternative emission factor is more accurate. An owner or operator using site-specific data to derive an emission factor, or set of factors, shall meet the following requirements.
    - 1) If stack test data are used, the emission factor shall be based on the average emissions per unit of input, output, or gas volume, whichever is appropriate, of all valid stack tests conducted during at least a five-year period encompassing the period over which the emissions are being computed, provided all stack tests used shall represent the same operational and physical configuration of the unit.
    - 2) Multiple emission factors shall be used as necessary to account for variations in emission rate associated with variations in the emissions unit's operating rate or operating conditions during the period over which emissions are computed.
    - 3) The owner or operator shall compute emissions by multiplying the appropriate emission factor by the appropriate input, output or gas volume value for the period over which the emissions are computed. The owner or operator shall not compute emissions by converting an emission factor to pounds per hour and then multiplying by hours of operation, unless the owner or operator demonstrates that such computation is the most accurate method available.
  - b. If site-specific data are not available to derive an emission factor, the owner or operator may use

## **COMMON CONDITIONS**

a published emission factor directly applicable to the process for which emissions are computed. If no directly-applicable emission factor is available, the owner or operator may use a factor based on a similar, but different, process.

- (5) Accounting for Emissions During Periods of Missing Data from CEMS, PEMS, or CPMS. In computing the emissions of a pollutant, the owner or operator shall account for the emissions during periods of missing data from CEMS, PEMS, or CPMS using other site-specific data to generate a reasonable estimate of such emissions.
- (6) Accounting for Emissions During Periods of Startup and Shutdown. In computing the emissions of a pollutant, the owner or operator shall account for the emissions during periods of startup and shutdown of the emissions unit.
- (7) Fugitive Emissions. In computing the emissions of a pollutant from a facility or emissions unit, the owner or operator shall account for the fugitive emissions of the pollutant, to the extent quantifiable, associated with such facility or emissions unit.
- (8) Recordkeeping. The owner or operator shall retain a copy of all records used to compute emissions pursuant to this rule for a period of five years from the date on which such emissions information is submitted to the department for any regulatory purpose.
- c. Annual Operating Report for Air Pollutant Emitting Facility
  - (1) The Annual Operating Report for Air Pollutant Emitting Facility (DEP Form No. 62-210.900(5)) shall be completed each year for the following facilities:
    - (a) All Title V sources.
    - (b) All synthetic non-Title V sources.
    - (c) All facilities with the potential to emit ten (10) tons per year or more of volatile organic compounds or twenty-five (25) tons per year or more of nitrogen oxides and located in an ozone nonattainment area or ozone air quality maintenance area.
    - (d) All facilities for which an annual operating report is required by rule or permit.
  - (2) Notwithstanding paragraph 62-210.370(3)(a), F.A.C., no annual operating report shall be required for any facility operating under an air general permit.
  - (3) The annual operating report shall be submitted to the appropriate Department of Environmental Protection (DEP) division, district or DEP-approved local air pollution control program office by April 1 of the following year.
  - (4) Beginning with 2007 annual emissions, emissions shall be computed in accordance with the provisions of subsection 62-210.370(2), F.A.C., for purposes of the annual operating report.

[RULE 62-210.370, F.A.C.]

# CITATION FORMATS AND GLOSSARY OF COMMON TERMS

#### **CITATION FORMATS**

The following illustrate the formats used in the permit to identify applicable requirements from permits and regulations.

#### **Old Permit Numbers**

Example:Permit No. AC50-123456 or Permit No. AO50-123456Where:"AC" identifies the permit as an Air Construction Permit<br/>"AO" identifies the permit as an Air Operation Permit<br/>"123456" identifies the specific permit project number

#### **New Permit Numbers**

Example: Permit Nos. 099-2222-001-AC, 099-2222-001-AF, 099-2222-001-AO, or 099-2222-001-AV

<u>Where</u>: "099" represents the specific county ID number in which the project is located

"2222" represents the specific facility ID number for that county

"001" identifies the specific permit project number

"AC" identifies the permit as an air construction permit

"AF" identifies the permit as a minor source federally enforceable state operation permit

"AO" identifies the permit as a minor source air operation permit

"AV" identifies the permit as a major Title V air operation permit

#### **PSD Permit Numbers**

Example: Permit No. PSD-FL-317

<u>Where</u>: "PSD" means issued pursuant to the preconstruction review requirements of the Prevention of Significant Deterioration of Air Quality

"FL" means that the permit was issued by the State of Florida

"317" identifies the specific permit project number

#### Florida Administrative Code (F.A.C.)

Example: [Rule 62-213.205, F.A.C.]

Means: Title 62, Chapter 213, Rule 205 of the Florida Administrative Code

#### Code of Federal Regulations (CFR)

Example: [40 CRF 60.7]

Means: Title 40, Part 60, Section 7

## **SECTION 4. APPENDIX CF**

## CITATION FORMATS AND GLOSSARY OF COMMON TERMS

## **GLOSSARY OF COMMON TERMS**

° <b>F</b> : degrees Fahrenheit	lb: pound
acfm: actual cubic feet per minute	MACT: maximum achievable technology
ARMS: Air Resource Management System	<b>MMBtu:</b> million British thermal units
(Department's database)	MSDS: material safety data sheets
<b>BACT</b> : best available control technology	MW: megawatt
<b>Btu</b> : British thermal units	<b>NESHAP</b> : National Emissions Standards for
CAM: compliance assurance monitoring	Hazardous Air Pollutants
<b>CEMS</b> : continuous emissions monitoring system	<b>NO<sub>X</sub></b> : nitrogen oxides
cfm: cubic feet per minute	<b>NSPS</b> : New Source Performance Standards
<b>CFR</b> : Code of Federal Regulations	<b>O&amp;M</b> : operation and maintenance
<b>CO</b> : carbon monoxide	O <sub>2</sub> : oxygen
COMS: continuous opacity monitoring system	Pb: lead
<b>DEP</b> : Department of Environmental Protection	<b>PM</b> : particulate matter
<b>Department</b> : Department of Environmental Protection	$\mathbf{PM}_{10}$ : particulate matter with a mean aerodynamic diameter of 10 microns or less
dscfm: dry standard cubic feet per minute	<b>PSD</b> : prevention of significant deterioration
EPA: Environmental Protection Agency	<b>psi</b> : pounds per square inch
<b>ESP</b> : electrostatic precipitator (control system for reducing particulate matter)	<b>PTE</b> : potential to emit
EU: emissions unit	<b>RACT</b> : reasonably available control technology
E.O. Elevide Administration Code	<b>RATA</b> : relative accuracy test audit
F.A.C.: Florida Administrative Code	SAM: sulfuric acid mist
F.D.: forced draft	scf: standard cubic feet
F.S.: Florida Statutes	scfm: standard cubic feet per minute
FGR: flue gas recirculation	SIC: standard industrial classification code
F: fluoride	SNCR: selective non-catalytic reduction (control
ft <sup>2</sup> : square feet	system used for reducing emissions of nitrogen oxides)
ft <sup>3</sup> : cubic feet	SQ.: sulfur dioxide
<b>gpm</b> : gallons per minute	TPH: tons per hour
gr: grains	TDV: tops per year
HAP: hazardous air pollutant	ITT. tons per year
Hg: mercury	system
I.D.: induced draft	VE: visible emissions
<b>ID</b> : identification	<b>VOC</b> : volatile organic compounds
kPa: kilopascals	

#### SECTION 4. APPENDIX GC

#### GENERAL CONDITIONS

The permittee shall comply with the following general conditions from Rule 62-4.160, F.A.C.

- 1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
- 2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
- 3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey and vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
- 4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
- 5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
- 6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
- 7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:
  - a. Have access to and copy and records that must be kept under the conditions of the permit;
  - b. Inspect the facility, equipment, practices, or operations regulated or required under this permit, and,
  - c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

- 8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
  - a. A description of and cause of non-compliance; and
  - b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

#### **SECTION 4. APPENDIX GC**

#### GENERAL CONDITIONS

- 9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
- 10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.
- 11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
- 12. This permit or a copy thereof shall be kept at the work site of the permitted activity.
- 13. This permit also constitutes:
  - a. Determination of Best Available Control Technology (N/A);
  - b. Determination of Prevention of Significant Deterioration (N/A); and
  - c. Compliance with New Source Performance Standards (N/A).
- 14. The permittee shall comply with the following:
  - a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
  - b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application or this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
  - c. Records of monitoring information shall include:
    - 1) The date, exact place, and time of sampling or measurements;
    - 2) The person responsible for performing the sampling or measurements;
    - 3) The dates analyses were performed;
    - 4) The person responsible for performing the analyses;
    - 5) The analytical techniques or methods used; and
    - 6) The results of such analyses.
- 15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.