Florida Department of Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Rick Scott
Governor

Jennifer Carroll
Lt. Governor

Herschel T. Vinyard, Jr.
Secretary

PERMITTEE

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

Authorized Representative:
Mr. Ron Yasurek, Plant Manager

Air Permit No. 1050059-066-AC, Revised Package, Mosaic Fertilizer, LLC
New Wales Facility, Multifos Plant Kiln C Dump Chute, Air Intake, and Steam Feed
Expires: June 23, 2012

PROJECT AND LOCATION

This is the final air construction permit for the use of the existing kiln dump chute and for air intake into the scrubbing system during startup for the Multifos Plant Kiln C. Oxides of nitrogen (NOx) emissions limits will be maintained through operational control of steam feed into the kiln. This plant is at the existing New Wales Facility (SIC No. 2874), which is located in Polk County at 3095 Highway 640 in Mulberry, Florida. The UTM Coordinates are Zone 17, 396.6 kilometers (km) East and 3078.9 km North.

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

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.). 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 Tallahassee, Florida

(DRAFT)

_____ _____

Jeffery F. Koerner, Program Administrator (Date)
Permitting and Compliance Section
Division of Air Resource Management

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 _____(DRAFT)_____ to the persons listed below.

Mr. Ron Yasurek, Mosaic Fertilizer, LLC (ronald.yasurek@mosaicco.com)
Mr. Rama Iyer, Mosaic Fertilizer, LLC (rama.iyer@mosaicco.com)
Mr. Pradeep Raval, Koogler & Associates, Inc. (praval@kooglerassociates.com)
Ms. Cindy Zang-Torres, DEP Southwest District Office (cindy.zhang-torres@dep.state.fl.us)
Ms. Kathleen Forney, EPA Region 4 (forney.kathleen@epa.gov)
Ms. Heather Abrams, EPA Region 4 (abrams.heather@epa.gov)
Ms. Vickie Gibson, DEP BAR Reading File (victoria.gibson@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)

_____ _____
(Clerk) (Date)

FACILITY DESCRIPTION

The existing Multifos animal feed ingredient facility consists of a common mixed feed preparation section for feeding phosphate-containing material to three rotary defluorination kilns and the associated processing and handling equipment. This permit supplements all previously issued air construction and operation permits for the Multifos Plant Kiln C.

PROJECT DESCRIPTION

The applicant request that the existing kiln dump chute and air intake into the scrubbing system during startup for the existing Multifos Plant Kiln C be permitted. The dump chute was installed as part of the original project and is used for separating the off-specification product. During plant startup, ambient air is used to maintain a proper operational flow rate to through the air scrubbing system. Mosaic conducted NOx emissions testing that demonstrated compliance with the limits by controlling the flow ratio of steam to natural gas fuel. The applicant requests that oxides of nitrogen (NOx) limits be implemented through operational control of steam feed into the kiln.

EMISSION UNITS

This project potentially affects the following existing emissions units.

EU No.	Emissions Units Description
074	Kiln C Scrubber Stack
075	Kiln C Cooler Baghouse
076	Kiln C Milling and Sizing Baghouse

REGULATORY CLASSIFICATION

- The facility is a major source of hazardous air pollutants (HAP).
- The facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The facility is a major stationary source in accordance with Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

APPENDICES

The following Appendices are attached as part of this permit.

Appendix A. Citation Formats and Glossary of Common Terms

Appendix B. General Conditions

SECTION 2. ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: The permitting authority for this project is the Bureau of Air Regulation, Division of Air Resource Management, Florida Department of Environmental Protection (Department). The Bureau of Air Regulation's mailing address is 2600 Blair Stone Road (MS #5505), Tallahassee, Florida 32399-2400. All documents related to applications for permits to operate an emissions unit shall be submitted to the Air Resource Section of the Department's Southwest District Office at 13051 North Telecom Parkway, Temple Terrace, FL 33637-0926.
2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Air Resource Section of the Department's Southwest District Office at 13051 North Telecom Parkway, Temple Terrace, FL 33637-0926.
3. Appendices: The following Appendices are attached as a part of this permit: Appendix A (Citation Formats and Glossary of Common Terms); Appendix B (General Conditions); and Appendix C (CEMS 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: The permittee shall notify the Compliance Authority upon commencement of construction. No new emissions unit shall be constructed and no existing emissions unit shall be 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. Application for Title V Permit: This permit authorizes installation of a NOx CEMS analyzer, the use of the existing dump chute and the intake of ambient air during startup of the Multifos Plant Kiln C. A Title V air operation permit is required for regular 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. 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 with copies to the Compliance Authority. [Rules 62-4.030, 62-4.050, 62-4.220 and Chapter 62-213, F.A.C.]

A. Multifos Plant Kiln C

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

EU No.	Emissions Units Description
074	Kiln C Scrubber Stack
075	Kiln C Cooler Baghouse
076	Kiln C Milling & Sizing Baghouse

PREVIOUS PERMITS

1. Permit Scope: Conditions of this permit supplement all previously issued air construction and operation permits for the affected emissions units. These conditions are in addition to all other applicable permit conditions and regulatory requirements. Unless otherwise specified by this permit, the permittee shall continue to comply with the conditions of those permits, which include restrictions and standards regarding capacities, production, operation, fuels, emissions, monitoring, record keeping, reporting, etc.
[Rule 62-4.070, F.A.C.]

EMISSION AND PERFORMANCE REQUIREMENTS

2. Dump Chute: The permittee is authorized to operate a dump chute for separating off-specification material from the Multifos Plant Kiln C. Such operation is expected to be intermittent and infrequent. To the extent practicable, the permittee shall minimize use of the dump chute.
[Plant Design and Rule 62-4.070, F.A.C.]

3. Scrubber Intake Air: During startup of the Multifos Plant Kiln C, the permittee is authorized to introduce ambient air into the scrubber system to maintain the flow rate necessary to operate within the parametric ranges specified in the Compliance Assurance Monitoring (CAM) plan.
[Design and Rule 62-4.070, F.A.C.]

4. Steam Flow Rate: Oxides of nitrogen (NOx) limits will be maintained through operational control of steam feed into the kiln. The permittee shall maintain a flow ratio into the kiln of 8 pounds of steam per one standard cubic foot of natural gas fuel (8:1). The 8:1 steam to fuel gas ratio will be maintained within a 24-hour block average and within a 10% operational variability or a minimum ratio of 7.2:1. There is no maximum steam to fuel gas ratio as the minimum is in place to limit the emissions of thermal NOx through combustion.

   The permittee may elect to conduct additional stack testing to establish a revised steam to gas ratio in compliance with the NOx standard. Within 90 days of firing the kiln with fuel oil, the permittee shall conduct additional stack testing to demonstrate compliance with the NOx standard. A steam to fuel oil ratio in pounds of steam per gallon of fuel oil will be established by stack testing.

   Compliance shall be determined for each 24-hour block averaging period by calculating the arithmetic average of all valid 15 minute periods that occur within that 24-hour block averaging period. The 24-hour block average may consist of less than 24- hours of data.
[Rule 62-4.070, F.A.C.]

RECORDKEEPING

5. Operational Records: The permittee shall maintain the following records in written or electronic operational logs: date, time and duration of dump chute operation; date, time and duration of ambient air intake to the scrubber system during kiln startup. Operational records of kiln production, steam feed, fuel flow rates, and steam to fuel ratio will be maintained in written or electronic format.
[Rule 62-4.070(3), F.A.C.]