Florida Department of
Environmental Protection
Southwest District Office
13051 North Telecom Parkway
Temple Terrace, Florida 33637-0926

Rick Scott
Governor

Jennifer Carroll
Lt. Governor

Herschel T. Vinyard Jr.
Secretary

FINAL PERMIT

PERMITTEE

Supermag, L.C.
4100 Glades Cut-off Road
Fort Piece, FL 34981

Authorized Representative:
Mr. Michael Hudson, President

Air Permit No. 1050314-006-AO
Permit Expires: 10/01/2015
Site Name : Supermag Processing Facility
Minor Air Operation Permit
Project Name: Operation Permit Renewal

This is the final permit to renew Air Operation Permit No. 1050314-005-AO for a Supermag processing facility (Standard Industrial Classification No. 2810). The facility is located in Polk County at 8560 Fort Green Road in Bradley, Florida. The UTM coordinates are Zone 17, 404.17 km East, and 3067.84 km North.

This final permit is organized by the following sections:

Section 1. General Information

Section 2. Administrative Requirements and Facility-wide Specific Conditions

Section 3. Emissions Unit Specific Conditions

Section 4. Appendices

Due to the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of Section 4 of this permit.

This air pollution permit is issued under the provisions of: Chapter 403 of the Florida Statutes (F.S.) and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to conduct the proposed work in accordance with the conditions of this permit.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen days of receipt of this notice of final permit. Petitions filed by any persons other than those entitled to written notice under section 120.60(3) of the Florida Statutes must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of final permit, whichever occurs first. Under section 120.60(3), however, any person who asked the Department for notice of agency action may file a petition within fourteen days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 F.S., or to intervene in this proceeding and

participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with rule 28-106.205 of the Florida Administrative Code.

All petitions filed under these rules shall contain:

(a) The name and address of each agency affected and each agency's file or identification number, if known;
(b) The name, address, and telephone number of the petitioner; the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination;
(c) A statement of when and how the petitioner received notice of the agency decision;
(d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;
(e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action;
(f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action, including an explanation of how the alleged facts relate to the specific rules or statutes; and
(g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by rule 28-106.301 of the Florida Administrative Code.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation is not available in this proceeding.

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, 3900 Commonwealth Boulevard, Mail Station #35, 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 thirty days after this order is filed with the clerk of the Department.

Executed in Hillsborough County, Florida

8/2/12

Robert C. Wong — Effective Date
District Air Program Administrator
Southwest District

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Final Air Permit package (including the Final Permit and the Appendices) was sent by electronic mail (or a link to these documents made available electronically on a publicly accessible server) with received receipt requested before the close of business on the date indicated below to the persons listed below.

Mike Hudson, Supermag, L.C., Mike.Hudson@diamond-r.com
Linda McMillan, Supermag, L.C., Linda.McMillan@diamond-r.com
Lynn Robinson, P.E., Southern Environmental Sciences, Inc., lrobinson@sesfla.com
Danielle Henry, Air Program Compliance Manager, Danielle.D.Henry@dep.state.fl.us

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency clerk, receipt of which is hereby acknowledged.

Carol J. Moore — 8/2/2012
(Clerk) (Date)

FACILITY AND PROJECT DESCRIPTION

This facility processes Supermag, a magnesium sulfite/sulfate product that is used as a water soluble component in fertilizer blends.

Supermag is a magnesium sulfite/sulfate product that is used as a water-soluble component in fertilizer blends. The process uses a magnesium sulfite co-product (MSC) produced at a power plant located in the Northeast United States. The MSC is a mixture of magnesium sulfite and magnesium sulfate and has 17% to 29% total magnesium (Mg) content and 16% to 18% water-soluble Mg content.

Facility ID No. 1050314	
ID No.	Emission Unit Description
001	Unloading of MSC from Railcars to Storage Silo
002	Truck/Railcar Loadout

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

Exempt Emission Units/Activities

Supermag Granulation, Processing and Storage

During the granulation process, water and other granulation aids are added to the MSC. A hydration reaction generates sufficient heat to drive the mixture to a temperature of over 180 degrees Fahrenheit where the water becomes chemically bound (crystallization). This crystallization produces a granulation effect on the mixture, which results in a Supermag product in a range of material sizes from five-inch lumps to fines of 200-mesh. The raw Supermag is discharged from the mixer/blender, via a conveyor where it cures for approximately ten (10) minutes.

The product is then conveyed to an enclosed Midwestern two-deck screening system where the oversized material is sent to a hammer mill and/or a roll crusher that discharge to a Midwestern five-deck screen via a conveyor. The remaining product passes through the screening system where a granular product, prill product, and fine product are conveyed inside partially enclosed covered storage buildings.

The finished product that averages 16% total Mg and 14% water-soluble Mg is loaded by payloader into a hopper inside the storage building.

[Rule 62-4.040, F.A.C.]

Sludge Handling Activities

The facility receives water treatment sludge by railcar and transfers the sludge to trucks to be shipped offsite.
[Rule 62-210.300(3)(b)1., F.A.C.]

FACILITY REGULATORY CLASSIFICATION

- The facility is not a major source of hazardous air pollutants (HAPs).
- The facility has no units subject to the acid rain provisions of the Clean Air Act (CAA).
- The facility is not a Title V major source of air pollution in accordance with Chapter 62-213, F.A.C.
- The facility is not a major stationary source in accordance with Rule 62-212.400(PSD), F.A.C.
- This facility is a synthetic non-Title V source for Particulate Matter (PM_{10}). The process rate limitations and restriction on hours of operation will ensure that the facility's PM_{10} emissions will be below the threshold for a Title V source.

PERMIT HISTORY/AFFECTED PERMITS

Replaces Permit No. 1050314-005-AO.

This facility has been under a long-term reserve shutdown since October 1, 2010. In accordance with Rule 62-210.300(2)(a) b., F.A.C., the operation permit shall be renewed for a period not to exceed five years from the date of shutdown.

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

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

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

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

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

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

   a. Appendix A. Citation Formats and Glossary of Common Terms;
   b. Appendix B. General Conditions;
   c. Appendix C. Common Conditions; and
   d. Appendix D. Common Testing Requirements.

4. Applicable Regulations, Forms and Application Procedures: Unless otherwise specified in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403, F.S.; and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296 and 62-297, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations.

5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time.
   [Rule 62-4.080, F.A.C.]

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

7. Unconfined Emissions of Particulate Matter: All reasonable precautions shall be taken to prevent and control the generation of unconfined emissions of PM. These provisions are applicable to any source, including but not limited to, vehicular movement, transportation of materials, construction, alteration, demolition or wrecking, or industrial related activities such as loading,

unloading, storing, and handling. Reasonable precautions for this operation shall include but are not limited to the following:

a. Application of vegetable oil during product loadout to trucks/railcars;

b. Use of a loading chute during truck/railcar loadout;

c. Application of water to paved and unpaved roads to reduce PM re-entrainment;

d. Removal of PM from buildings or work areas;

e. Enclosure or covering of conveyor systems, where possible; and

f. Applicable housekeeping practices.

[Rule 62-296.320(4)(c), F.A.C.; Construction Permit 1050314-004-AC]

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

9. Operation Permit Renewal Application: A completed application for renewal of the operation permit shall be submitted to the Permitting Authority no later than 60 days prior to the expiration date of the operation permit. To properly apply for an operation permit, the applicant shall submit the following:

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

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

   c. copies of the most recent compliance test reports required by Specific Condition No. A.10., if not previously submitted; and

   d. copies of the most recent month of records/logs specified in Specific Condition No(s). A.11.

[Rules 62-4.030, 62-4.050, 62-4.070(3), 62-4.090, 62-210.300(2), and 62-210.900, F.A.C.]

A. EU No. 001 Unloading of MSC from Railcars to Silo & EU No. 002 Truck/Railcar Loadout

This section of the permit addresses the following emissions units.

ID No.	Emission Unit Description
001 & 002	Unloading of MSC to Silo & Truck/Railcar Loadout Magnesium sulfite co-product (MSC) arrives in railcars. The railcar to underground hopper transfer serves as a source of fugitive emissions; the hopper is then pneumatically unloaded into a 200-ton capacity storage silo. Emissions from the unloading and storage process are controlled by a baghouse located on top of the silo. The Supermag granulation and processing consists of a dual shaft mixer/blender (with exhaust vents), conveyors, two screening systems (with fugitive emission points at the transfer point between the screen and conveyors, hammer mill, a roll crusher, and product storage. The maximum design production rate is 30 tons per hour. See Exempt Emissions Units/Activities on page 4 for detailed description. The product is conveyed from the hopper in the storage building to the loadout hopper. The product is then blended with a vegetable oil dust suppressant prior to being chute-loaded into one (1) of two (2) loading sites (that are not used concurrently) for truck or railcar shipment. Fugitive emissions can be expected at the vegetable oil application, the conveyor to hopper transfer point, and the chute to railcar or truck loadout.

PERFORMANCE RESTRICTIONS

A.1. Permitted Capacity: The monthly average processing rate (in tons/hr) shall not exceed:

Emission Unit	Maximum Rate Limit *(tons/hr)*
Unloading of MSC from Railcar to Silo (EU No. 001)	12.5
Truck/Railcar Loadout (EU No. 002)	50.0

[Rules 62-4.160(2) and 62-210.200 (Definition 'Potential to Emit'), F.A.C.; Construction Permit 1050314-004-AC]

A.2. Product Loadout Limitation: The facility shall not loadout material into trucks and railcars simultaneously.
[Rule 62-210.200 (Definition 'Potential to Emit'), F.A.C. and Construction Permit 1050314-004-AC]

A.3. Restricted Operation: The hours of operation are limited to 3120 hours per year.
[Rules 62-4.070(3), 62-210.200(PTE), and 62-4.160(2) F.A.C.; Construction Permit 1050314-004-AC]

EMISSIONS STANDARDS

A.4. Visible Emissions Standard: No person shall cause, let, permit or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than 20% opacity. In order to provide reasonable assurance that the precautions taken to control fugitive particulate emissions are adequate, visible emissions for all fugitive particulate emission sources at this facility should not exceed five percent (5%) opacity. If this five percent (5%) limit is exceeded, it shall not be considered a violation in and of itself, but an indicator that additional controls may be needed.
[Rule 62-296.320(4)(b)1., F.A.C. and Construction Permit 1050314-004-AC]

TESTING REQUIREMENTS

A.5. Visible Emissions Tests: During each federal fiscal year (October 1st to September 30th), the MSC Silo and truck/railcar loadout shall be tested to demonstrate compliance with the 5% Visible Emissions (VE) standard. If an emissions unit has not operated any day during a federal fiscal year, the annual VE test may be waived for that year. The facility shall notify the Department in writing at least 15 days before the end of the fiscal year (i.e., September 30) that the annual test will not be conducted for that unit. The unit should be tested as soon as practical but no later than 30 days after resuming operation.
[Rule 62-297.310, F.A.C. and Construction Permit 1050314-004-AC]

A.6. Test Requirements: Tests shall be conducted in accordance with the applicable requirements specified in Appendix D (Common Testing Requirements) of this permit. The test shall be performed while all the appropriate equipment is in operation to represent operating conditions during which the highest opacity emissions can reasonably be expected to occur.
[Rule 62-297.310, F.A.C. and Construction Permit 1050314-004-AC]

A.7. Test Method(s): Required tests shall be performed in accordance with the following reference method:

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

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

NOTIFICATION REQUIREMENTS

A.8. Test Notification: The permittee shall notify the Compliance Authority in writing at least 15 days prior to any required tests. The notification must include the following information: the date, time, and location of each test; the name and telephone number of the facility's contact

person who will be responsible for coordinating the test; and the name, company, and the telephone number of the person conducting the test.

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

[Rule 62-297.310(7)(a)9., F.A.C.]

A.9. Notification of Startup: Since the facility has been under a long-term reserve shutdown since October 1, 2010, the permittee shall notify the Department in writing of the date of intent to start up the facility, a minimum of 60 days prior to the intended startup date.

a. The notification shall include information as to the startup date, anticipated emissions rates or pollutants released, changes to processes or control devices which will result in changes to emission rates, and any other conditions which may differ from the valid outstanding operation permit.

b. If, due to an emergency, a startup date in not know 60 days prior thereto, the owner shall notify the Department as soon as possible after the date such startup is ascertained.

[Rule 62-4.070, F.A.C., and Rule 62-210.200, F.A.C., (Definition of Commence Operation)]

RECORDS AND REPORTS

A.10. Test Reports: The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix D (Common Testing Requirements) of this permit. Records of the actual MSC silo filling rate and the truck/railcar loadout rate during the test period shall be included in the test report along with a copy of the most recent monthly log.
[Rule 62-297.310(8), F.A.C.]

A.11. Monthly Log: In order to document compliance with Specific Condition Nos. A.1. and A.3, a monthly operating log shall be maintained. At a minimum the monthly operating log shall include the following:

a. facility name, facility ID No., emission unit ID No., and description (e.g., Supermag, L.C., 1050314, E.U. 001, Unloading of MSC from Railcars to Silo);

b. Month and year of log;

c. Amount of MSC (in tons) unloaded from railcars into storage silo for the month;

d. Average MSC silo filling rate (in tons/hr) for the month;

e. Amount of Supermag product loadout (in tons) into trucks and railcars;

f. Average Truck/railcar loadout rate (in tons/hr) for the month; and

g. Monthly hours of operation; and.

h. Hours of operation for the most recent consecutive 12-month period.

The operating log shall be retained at the facility for at least three (3) years and be available for Department inspection upon request. Monthly logs shall be completed by the end of the following month.
[Rule 62-4.070(3), F.A.C. and Construction Permit 1050314-004-AC]