



Mitchell E. Daniels, Jr.  
Governor

Thomas W. Easterly  
Commissioner

100 North Senate Avenue  
Indianapolis, Indiana 46204  
(317) 232-8603  
(800) 451-6027  
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TO: Interested Parties / Applicant  
DATE: October 6, 2005  
RE: Magnesium Technologies Corp. / 141-20655-00185  
FROM: Paul Dubenetzky  
Chief, Permits Branch  
Office of Air Quality

### Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures  
FNPER.dot 1/10/05



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**FEDERALLY ENFORCEABLE STATE  
OPERATING PERMIT (FESOP)  
OFFICE OF AIR QUALITY**

**Magnesium Technologies Corp., d/b/a Rossborough  
205 State Road 104  
Walkerton, Indiana 46574**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

The Permittee must comply with all conditions of this permit. Noncompliance with any provision of this permit is grounds for enforcement action; permit termination, revocation and reissuance, or modification; and denial of a permit renewal application. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17

Operation Permit No.: F141-20655-00185	
Issued by: Original Signed By: Paul Dubenetzky, Assistant Commissioner Office of Air Quality	Issuance Date: October 6, 2005  Expiration Date: October 6, 2010

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## SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

### A.1 General Information [326 IAC 2-8-3(b)]

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The Permittee owns and operates a stationary magnesium processing and packaging operation.

Authorized individual:	General Manager
Source Address:	205 State Road 104, Walkerton, Indiana 46574
Mailing Address:	PO Box 175, Walkerton, Indiana 46574-0175
General Source Phone:	(574) 586-9559
SIC Code:	3341
Source Location Status:	Saint Joseph Nonattainment for Ozone under the 8-hour standard Attainment for all other criteria pollutants
Source Status:	Federally Enforceable State Operating Permit (FESOP) Minor Source, under PSD, Emission Offset Rules; Minor Source, Section 112 of the Clean Air Act

### A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

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This stationary source consists of the following emission units and pollution control devices:

- (a) Three (3) Primary Magnesium Granulating lines, identified as MgL1, MgL2, and MgL3, constructed in 1994, consisting of one (1) chipper and two (2) grinders per line, with a maximum capacity of 1,000 pounds per hour per line, each equipped with a one (1) of three (3) cyclones integral to the lines, identified as C1, C2, and C3, and exhausting to the atmosphere.
- (b) Two (2) Lime Receiving Silos, identified as S1 and S2, constructed in 2002, with a combined capacity of 19,000 pounds per hour and each having a storage capacity of 150,000 pounds, each controlled by one (1) of two (2) dust collectors for particulate control, identified as CF1 and CF2, and exhausting to the atmosphere.
- (c) Two (2) Lime Granulating and Screening Units, identified as LG1 and LG2, constructed in 2002, with a combined process capacity of 19,000 pounds per hour, controlled by one (1) dust collector for particulate control, identified as DF02-4-A, and exhausting to the atmosphere.
- (d) Five (5) Pig Storage Hoppers for Granulated Lime, identified as PS1 – PS5, constructed in 2002, with a combined capacity of 19,000 pounds per hour, and each having a storage capacity of 200,000 pounds, controlled by one (1) dust collector for particulate control, identified as CF3, and exhausting to atmosphere.
- (e) Two (2) Lime Storage Vessels, identified as LSV1 and LSV2, constructed in 1994, with a combined capacity of 16,000 pounds per hour, and each having a storage capacity of 30,000 pounds, each controlled by one (1) of two (2) dust collectors for particulate control, identified as WB1 and DF02-2, constructed in 2002, and exhausting to atmosphere.

- (f) One (1) Whirlaire Flow Lime Blending Unit, identified as BCL, constructed in 1998, rated at 16,000 pounds per hour, controlled by one (1) dust collector for particulate control, identified as DF02-4-B, constructed in 2002, and exhausting to the atmosphere.
- (g) One (1) enclosed vehicle loading operation, rated at 16,000 pounds per hour, controlled by one (1) dust collector for particulate control, identified as DF02-4-B, constructed in 2002, and exhausting to the atmosphere.

A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Equipment powered by internal combustion engines of capacity equal to or less than 500,000 Btu/hour, except where total capacity of equipment operated by one stationary source exceeds 2,000,000 Btu/hour.
- (b) A petroleum fuel, other than gasoline, dispensing facility having a storage capacity less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.
  - (1) One (1) 300 gallon above ground Diesel Fuel Tank.
- (c) Application of oils, greases, lubricants, or other nonvolatile materials applied as temporary protective coatings.
  - (1) Source maintenance activities.
- (d) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.
  - (1) Source maintenance activities.
- (e) Closed loop heating and cooling systems.
  - (1) Electric forced air heating and cooling systems.
- (f) Activities associated with the transportation and treatment of sanitary sewage, provided discharge to the treatment plant is under the control of the owner/operator, that is, an on-site sewage treatment facility.
  - (1) Enclosed subsurface septic system.
- (g) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (h) On-site fire and emergency response training approved by the department.
  - (1) "No open flame" training conducted for local emergency response agencies.
- (i) A laboratory as defined in 326 IAC 2-7-1(21)(D).
  - (1) QA/QC physical analysis laboratory.
- (j) Other categories with emissions below insignificant thresholds:
  - (1) One (1) 1,500 gallon Liquefied Nitrogen Tank.
  - (2) Four (4) Argon Fire Suppression Systems using bottled Argon Cylinders.

A.4 FESOP Applicability [326 IAC 2-8-2]

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This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) for a Federally Enforceable State Operating Permit (FESOP).

A.5 Prior Permits Superseded [326 IAC 2-1.1-9.5]

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(a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either

(1) incorporated as originally stated,

(2) revised, or

(3) deleted

by this permit.

(b) All previous registrations and permits are superseded by this permit.

## SECTION B GENERAL CONDITIONS

### B.1 Permit No Defense [IC 13]

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a FESOP under 326 IAC 2-8.

### B.2 Definitions [326 IAC 2-8-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2, and 326 IAC 2-7) shall prevail.

### B.3 Permit Term [326 IAC 2-8-4(2)][326 IAC 2-1.1-9.5]

This permit is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

### B.4 Enforceability [326 IAC 2-8-6]

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

### B.5 Termination of Right to Operate [326 IAC 2-8-9] [326 IAC 2-8-3(h)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9.

### B.6 Severability [326 IAC 2-8-4(4)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

### B.7 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

### B.8 Duty to Provide Information [326 IAC 2-8-4(5)(E)]

- (a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit.
- (b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1 when furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

### B.9 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAQ, may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

B.10 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by an authorized individual of truth, accuracy, and completeness. This certification, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.
- (c) An authorized individual is defined at 326 IAC 2-1.1-1(1).

B.11 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than April 15 of each year to:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
  - (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
  - (2) The compliance status;
  - (3) Whether compliance was continuous or intermittent;
  - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and
  - (5) Such other facts as specified in Sections D of this permit, IDEM, OAQ, may require to determine the compliance status of the source.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

B.12 Preventive Maintenance Plan [326 IAC 1-6-3] [326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:

- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
- (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
- (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204

The PMP extension notification does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall implement the PMPs, including any required record keeping, as necessary to ensure that failure to implement a PMP does not cause or contribute to an exceedance of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMP does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation, Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

#### B.13 Emergency Provisions [326 IAC 2-8-12]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-8-12.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describes the following:
  - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
  - (2) The permitted facility was at the time being properly operated;

- (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, and Northern Regional Office, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone No.: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section) or,  
Telephone No.: 317-233-5674 (ask for Compliance Section)  
Facsimile No.: 317-233-5967

and

Northern Regional Office  
Telephone No.: 1-800-753-5519,  
Telephone No.: 574-245-4870  
Facsimile No.: 574-245-4877

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
  - (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

- (e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
  - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
  - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
    - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
    - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.
- (h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

B.14 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]

- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provision), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

**B.15 Permit Modification, Reopening, Revocation and Reissuance, or Termination**  
[326 IAC 2-8-4(5)(C)] [326 IAC 2-8-7(a)] [326 IAC 2-8-8]

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- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a FESOP modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ, determines any of the following:
  - (1) That this permit contains a material mistake.
  - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
  - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]
- (c) Proceedings by IDEM, OAQ, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

**B.16 Permit Renewal** [326 IAC 2-8-3(h)]

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- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ, and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, IN 46204

- (b) Timely Submittal of Permit Renewal [326 IAC 2-8-3]
  - (1) A timely renewal application is one that is:
    - (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
    - (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be

considered timely if received by IDEM, OAQ, on or before the date it is due.

- (2) If IDEM, OAQ, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.

- (c) **Right to Operate After Application for Renewal [326 IAC 2-8-9]**  
If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ, takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ, any additional information identified as needed to process the application.

**B.17 Permit Amendment or Revision [326 IAC 2-8-10] [326 IAC 2-8-11.1]**

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- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:
- Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204
- Any such application shall be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) The Permittee may implement the administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]
- (d) No permit amendment or modification is required for the addition, operation or removal of a nonroad engine, as defined in 40 CFR 89.2.

**B.18 Operational Flexibility [326 IAC 2-8-15][326 IAC 2-8-11.1]**

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- (a) The Permittee may make any change or changes at this source that are described in 326 IAC 2-8-15(b) through (d), without prior permit revision, if each of the following conditions is met:
- (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
- (2) Any approval required by 326 IAC 2-8-11.1 has been obtained;
- (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
- (4) The Permittee notifies the:
- Indiana Department of Environmental Management

Permits Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204

and

United States Environmental Protection Agency, Region V  
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

- (5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-8-15(b) through (d) and makes such records available, upon reasonable request, to public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ, in the notices specified in 326 IAC 2-8-15(b)(2), (c)(1), and (d).

- (b) **Emission Trades** [326 IAC 2-8-15(c)]  
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).
- (c) **Alternative Operating Scenarios** [326 IAC 2-8-15(d)]  
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ or U.S. EPA is required.
- (d) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

**B.19 Permit Revision Requirement** [326 IAC 2-8-11.1]

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A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-8-11.1.

**B.20 Inspection and Entry** [326 IAC 2-8-5(a)(2)][IC 13-14-2-2][IC 13-17-3-2][IC 13-17-3-2][IC13-30-3-1]

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Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

- (b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.21 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

- (a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:  
  
Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204  
  
The application which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.22 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16][326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.
- (b) Failure to pay may result in administrative enforcement action, or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

**B.23 Credible Evidence [326 IAC 2-8-4(3)][326 IAC 2-8-5][62 FR 8314][326 IAC 1-1-6]**

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For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of any condition of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether the Permittee would have been in compliance with the condition of this permit if the appropriate performance or compliance test or procedure had been performed.

## SECTION C SOURCE OPERATION CONDITIONS

Entire Source

### Emissions Limitations and Standards [326 IAC 2-8-4(1)]

#### C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

#### C.2 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

(a) Pursuant to 326 IAC 2-8:

- (1) The potential to emit any regulated pollutant, except particulate matter (PM), from the entire source shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period. This limitation shall also satisfy the requirements of 326 IAC 2-3 (Emission Offset);
- (2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and
- (3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.

(b) Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), potential to emit particulate matter (PM) from the entire source shall be limited to less than two hundred fifty (250) tons per twelve (12) consecutive month period.

(c) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided the source's potential to emit does not exceed the above specified limits.

(d) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

#### C.3 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A,

Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.4 Open Burning [326 IAC 4-1] [IC 13-17-9]

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The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

C.5 Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]

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The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and in 326 IAC 9-1-2.

C.6 Fugitive Dust Emissions [326 IAC 6-4]

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The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

C.7 Operation of Equipment [326 IAC 2-8-5(a)(4)]

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Except as otherwise provided by statute, rule or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

C.8 Stack Height [326 IAC 1-7]

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The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted.

C.9 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

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- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
- (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
  - (2) If there is a change in the following:
    - (A) Asbestos removal or demolition start date;
    - (B) Removal or demolition contractor; or
    - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management  
Asbestos Section, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (e) **Procedures for Asbestos Emission Control**  
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1 emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Demolition and renovation**  
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) **Indiana Accredited Asbestos Inspector**  
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.

### **Testing Requirements [326 IAC 2-8-4(3)]**

#### **C.10 Performance Testing [326 IAC 3-6]**

---

- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ, not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the Permittee submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

### **Compliance Requirements [326 IAC 2-1.1-11]**

#### **C.11 Compliance Requirements [326 IAC 2-1.1-11]**

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The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

### **Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]**

#### **C.12 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]**

---

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204

in writing, prior to the end of the initial ninety (90) day compliance schedule with full justification of the reasons for inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Unless otherwise specified in the approval for the new emissions unit, compliance monitoring for new emission units or emission units added through a permit revision shall be implemented when operation begins.

#### **C.13 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]**

---

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63 or other approved methods as specified in this permit.

**C.14 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)]  
[326 IAC 2-8-5(1)]**

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- (a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (" 2%) of full scale reading.
- (b) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

**Corrective Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]**

**C.15 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]**

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Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

- (a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.
- (b) These ERPs shall be submitted for approval to:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204

within ninety (90) days from the date of issuance of this permit.

**C.16 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68]**

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If a regulated substance, as defined in 40 CFR 68, is present at a source in more than a threshold quantity, the Permittee must comply with the applicable requirements of 40 CFR 68.

**C.17 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-8-4]  
[326 IAC 2-8-5]**

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- (a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, OAQ upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and is comprised of:
  - (1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected time frame for taking reasonable response steps.
  - (2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.
- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:

- (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or
  - (2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.
  - (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, and it will be ten (10) days or more until the unit or device will be shut down, then the Permittee shall promptly notify the IDEM, OAQ of the expected date of the shut down. The notification shall also include the status of the applicable compliance monitoring parameter with respect to normal, and the results of the response actions taken up to the time of notification.
  - (4) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (c) The Permittee is not required to take any further response steps for any of the following reasons:
- (1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.
  - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied.
  - (3) An automatic measurement was taken when the process was not operating.
  - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.
- (e) The Permittee shall record all instances when response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-8-12 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance

C.18 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4][326 IAC 2-8-5]

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a

description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.

- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

### **Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]**

#### **C.19 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]**

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- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

#### **C.20 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]**

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- (a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).
- (e) The first report covered the period commencing on the date of issuance of the original FESOP and ended on the last day of the reporting period. All subsequent reporting periods shall be based on calendar years, unless otherwise specified in this permit. For the purpose of this permit “calendar year” means the twelve (12) month period from January 1 to December 31 inclusive.

### **Stratospheric Ozone Protection**

#### **C.21 Compliance with 40 CFR 82 and 326 IAC 22-1**

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Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices pursuant to 40 CFR 82.156
- (b) Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

## SECTION D.1 FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-8-4(10)]:

- (a) Three (3) Primary Magnesium Granulating lines, identified as MgL1, MgL2, and MgL3, constructed in 1994, consisting of one (1) chipper and two (2) grinders per line, with a maximum capacity of 1,000 pounds per hour per line, each equipped with a one (1) of three (3) cyclones integral to the lines, identified as C1, C2, and C3, and exhausting to the atmosphere.
- (b) Two (2) Lime Receiving Silos, identified as S1 and S2, constructed in 2002, with a combined capacity of 19,000 pounds per hour and each having a storage capacity of 150,000 pounds, each controlled by one (1) of two (2) dust collectors for particulate control, identified as CF1 and CF2, and exhausting to the atmosphere.
- (c) Two (2) Lime Granulating and Screening Units, identified as LG1 and LG2, constructed in 2002, with a combined process capacity of 19,000 pounds per hour, controlled by one (1) dust collector for particulate control, identified as DF02-4-A, and exhausting to the atmosphere.
- (d) Five (5) Pig Storage Hoppers for Granulated Lime, identified as PS1 – PS5, constructed in 2002, with a combined capacity of 19,000 pounds per hour, and each having a storage capacity of 200,000 pounds, controlled by one (1) dust collector for particulate control, identified as CF3, and exhausting to atmosphere.
- (e) Two (2) Lime Storage Vessels, identified as LSV1 and LSV2, constructed in 1994, with a combined capacity of 16,000 pounds per hour, and each having a storage capacity of 30,000 pounds, each controlled by one (1) of two (2) dust collectors for particulate control, identified as WB1 and DF02-2, constructed in 2002, and exhausting to atmosphere.
- (f) One (1) Whirlaire Flow Lime Blending Unit, identified as BCL, constructed in 1998, rated at 16,000 pounds per hour, controlled by one (1) dust collector for particulate control, identified as DF02-4-B, constructed in 2002, and exhausting to the atmosphere.
- (g) One (1) enclosed vehicle loading operation, rated at 16,000 pounds per hour, controlled by one (1) dust collector for particulate control, identified as DF02-4-B, constructed in 2002, and exhausting to the atmosphere.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

### Construction Conditions

#### General Construction Conditions

##### D.1.1 Permit No Defense

This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

#### Effective Date of the Permit

##### D.1.2 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this section of this permit becomes effective upon its issuance.

**D.1.3 Modification to Construction Conditions [326 IAC 2]**

All requirements of these construction conditions shall remain in effect unless modified in a manner consistent with procedures established for revisions pursuant to 326 IAC 2.

**Emission Limitations and Standards [326 IAC 2-8-4(1)]**

**D.1.4 Particulate PSD Minor Limit [326 IAC 2-2]**

- (a) Particulate matter emissions from the three (3) Magnesium Granulating Lines (MgL1, MgL2, and MgL3) shall not exceed 2.00 pounds per hour each.
- (b) Particulate matter emissions from the two (2) Lime Receiving Silos (S1 and S2) shall not exceed 4.26 pounds per hour combined.
- (c) Particulate matter emissions from the two (2) Lime Granulating and Screening Units (LG1 and LG2) exhausted to Stack M shall not exceed 0.16 pounds per hour.
- (d) Particulate matter emissions from the five (5) Pig Storage Hoppers (PS1 – PS5) shall not exceed 4.26 pounds per hour.
- (e) Particulate matter emissions from the two (2) Lime Storage Vessels (LSV1 and LSV2) shall not exceed 3.48 pounds per hour combined.
- (f) Particulate matter emissions from the one (1) Whirlaire Flow Lime Blending Unit (BCL) shall not exceed 3.48 pounds per hour.
- (g) Particulate matter emissions from the one (1) enclosed vehicle loading operation shall not exceed 1.00 pounds per hour.
- (h) Compliance with these limits renders the requirements of 326 IAC 2-2 not applicable.

**D.1.5 PM-10 FESOP Limit [326 IAC 2-8]**

Pursuant to 326 IAC 2-8 the source has chosen to limit PM-10 emissions to below 100 tons per year. Therefore, 326 IAC 2-7 (Part 70 Permit Program) will not be applicable.

The source will be in compliance with this PM10 limit by limiting the controlled units to less than a total of 53.00 tons per twelve (12) consecutive month period. The controlled units shall be limited as follows:

Unit	PM10 (pounds per hour)	PM10 (tons per year)
Magnesium Granulating Line 1 (MgL1)	1.00	4.38
Magnesium Granulating Line 2 (MgL2)	1.00	4.38
Magnesium Granulating Line 3 (MgL3)	1.00	4.38
Lime Receiving Silo 1 (S1)	2.13	9.32
Lime Receiving Silo 1 (S2)	combined	combined
Lime Granulating and Screening Units (LG1 and LG2)	0.08 combined	0.37 combined

Pig Storage Hopper (PS1-PS5)	2.13	9.32
Lime Storage Vessel 1 (LSV1)	1.79	7.85
Lime Storage Vessel 2 (LSV2)	combined	combined
Whirlaire Flow Blending (BCL)	1.79	7.85
Vehicle Loading	0.50	2.18
Total Emissions		50.03

**D.1.6 Particulate [326 IAC 6-3-2]**

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emissions from the source shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour;  
 and P = process weight rate in tons per hour

The emissions rate E has been established for the units as follows:

Process Description (Emission Units)	Process Weight Rate (tons/hr)	PM Emission (lb/hr)
Magnesium Granulating Line 1 (MgL1)	0.50	2.58
Magnesium Granulating Line 2 (MgL2)	0.50	2.58
Magnesium Granulating Line 3 (MgL3)	0.50	2.58
Lime Receiving Silo 1 (S1)	9.5	18.53
Lime Receiving Silo 1 (S2)		
Lime Granulating and Screening Units (LG1 and LG2)		
Pig Storage Hopper (PS1-PS5)	9.5	18.53
Lime Storage Vessel 1 (LSV1)	8.00	16.51
Lime Storage Vessel 2 (LSV2)		
Whirlaire Flow Blending (BCL)		
Vehicle Loading		

**D.1.7 Preventive Maintenance Plan [326 IAC 2-8-4(9)]**

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control devices.

**Compliance Determination Requirements**

**D.1.8 Particulate Control**

In order to comply with D.1.4, D.1.5 and D.1.6, particulate from the magnesium grinding lines (MgL1, MgL2, and MgL3) shall be controlled by cyclones and the Permittee shall operate the control device in accordance with manufacturer's specifications.

In order to comply with D.1.4, D.1.5 and D.1.6, particulate from the Lime Storage Silos (S1, S2), the Lime Granulating and Screening Units (LG1, LG2), the Pig Storage Hoppers (PS1-PS5), the Lime Storage Vessels (LSV1, LSV2), the Whirlaire Lime Blending Unit (BCL), and Vehicle

Loading shall be controlled by baghouses and the Permittee shall operate the control devices in accordance with manufacturer's specifications.

### **Compliance Monitoring Requirements [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)]**

#### **D.1.9 Visible Emissions Notations**

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- (a) Daily visible emission notations of the cyclones (C1, C2, C3) and the dust collectors (CF1, CF2, DF02-4-A, CF3, WB1, DF02-2, and DF02-4-B) stack exhaust shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports shall be considered a deviation from this permit.

#### **D.1.10 Parametric Monitoring**

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The Permittee shall record the total static pressure drop across the dust collectors at least once per day when the process is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the dust collectors is outside the normal range of 0.5 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - -Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

#### **D.1.11 Dust Collector Inspections**

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An inspection shall be performed each calendar quarter of all filters (CF1, CF2, DF02-4-A, CF3, WB1, DF02-2, and DF02-4-B) when venting to the atmosphere. A dust collector inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. Inspections required by this condition shall not be performed in consecutive months. All defective bags shall be replaced.

#### **D.1.12 Cyclone Inspections**

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An inspection shall be performed each calendar quarter of all cyclones (C1, C2 and C3) when venting to the atmosphere. A cyclone inspection shall be performed within three months of

redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors.

#### D.1.13 Broken or Failed Bag Detection

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In the event that bag failure has been observed:

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan -Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit. If operations continue after bag failure is observed and it will be 10 days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.
- (b) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

#### D.1.14 Cyclone Failure Detection

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In the event that cyclone failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B – Emergency Provisions). Failure to take responsive steps in accordance with Section C – Compliance Response Plan – Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

### **Record Keeping and Reporting Requirement [326 IAC 2-8-4(3)] [326 IAC 2-8-16]**

#### D.1.15 Record Keeping Requirements

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- (a) To document compliance with Condition D.1.9, the Permittee shall maintain records of once per day visible emission notations of C1, C2, C3, CF1, CF2, DF02-4-A, CF3, WB1, DF02-2, and DF02-4-B stack exhaust.
- (b) To document compliance with Condition D.1.10, the Permittee shall maintain records once per day of the total static pressure drop during normal operation when venting to the atmosphere across CF1, CF2, DF02-4-A, CF3, WB1, DF02-2, and DF02-4-B.
- (c) To document compliance with Condition D.1.11 and D.1.12, the Permittee shall maintain records of the results of the inspections required under D.1.11 and D.1.12.

- (d) To document compliance with Condition D.1.7, the Permittee shall maintain of records of any additional inspections prescribed by the Preventive Maintenance Plan.
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

**D.1.16 Reporting Requirements**

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There are no specific reporting regulations applicable to these units.

## SECTION D.2 FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-8-4(10)]: Insignificant Activities

- (a) Equipment powered by internal combustion engines of capacity equal to or less than 500,000 Btu/hour, except where total capacity of equipment operated by one stationary source exceeds 2,000,000 Btu/hour.
- (b) A petroleum fuel, other than gasoline, dispensing facility having a storage capacity less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.
  - (1) One (1) 300 gallon above ground Diesel Fuel Tank.
- (c) Application of oils, greases, lubricants, or other nonvolatile materials applied as temporary protective coatings.
  - (1) Source maintenance activities.
- (d) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.
  - (1) Source maintenance activities.
- (e) Closed loop heating and cooling systems.
  - (1) Electric forced air heating and cooling systems.
- (f) Activities associated with the transportation and treatment of sanitary sewage, provided discharge to the treatment plant is under the control of the owner/operator, that is, an on-site sewage treatment facility.
  - (1) Enclosed subsurface septic system.
- (g) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (h) On-site fire and emergency response training approved by the department.
  - (1) "No open flame" training conducted for local emergency response agencies.
- (i) A laboratory as defined in 326 IAC 2-7-1(21)(D).
  - (1) QA/QC physical analysis laboratory.
- (j) Other categories with emissions below insignificant thresholds:
  - (1) One (1) 1,500 gallon Liquefied Nitrogen Tank.
  - (2) Four (4) Argon Fire Suppression Systems using bottled Argon Cylinders.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards [326 IAC 2-8-4(1)]

#### D.2.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the insignificant activities of brazing equipment, cutting torches, soldering equipment, welding equipment shall be limited to the following:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour;  
and P = process weight rate in tons per hour

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

### FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) CERTIFICATION

Source Name: Magnesium Technologies Corp., d/b/a Rossborough  
Source Address: 205 State Road 104, Walkerton, Indiana 46574  
Mailing Address: PO Box 175, Walkerton, Indiana 46574-0175  
FESOP No.: 141-20655-00185

**This certification shall be included when submitting monitoring, testing reports/results  
or other documents as required by this permit.**

Please check what document is being certified:

- Annual Compliance Certification Letter
- Test Result (specify) \_\_\_\_\_
- Report (specify) \_\_\_\_\_
- Notification (specify) \_\_\_\_\_
- Affidavit (specify) \_\_\_\_\_
- Other (specify) \_\_\_\_\_

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE BRANCH  
100 North Senate Avenue  
Indianapolis, Indiana 46204  
Phone: 317-233-5674  
Fax: 317-233-5967**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)  
EMERGENCY OCCURRENCE REPORT**

Source Name: Magnesium Technologies Corp., d/b/a Rossborough  
Source Address: 205 State Road 104, Walkerton, Indiana 46574  
Mailing Address: PO Box 175, Walkerton, Indiana 46574-0175  
FESOP No.: 141-20655-00185

**This form consists of 2 pages**

**Page 1 of 2**

- This is an emergency as defined in 326 IAC 2-7-1(12)
- The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
  - The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency:
Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A

Page 2 of 2

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency?    Y    N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO <sub>2</sub> , VOC, NO <sub>x</sub> , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: \_\_\_\_\_  
Title / Position: \_\_\_\_\_  
Date: \_\_\_\_\_  
Phone: \_\_\_\_\_

A certification is not required for this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE DATA SECTION**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)  
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: Magnesium Technologies Corp., d/b/a Rossborough  
Source Address: 205 State Road 104, Walkerton, Indiana 46574  
Mailing Address: PO Box 175, Walkerton, Indiana 46574-0175  
FESOP No.: 141-20655-00185

Months: \_\_\_\_\_ to \_\_\_\_\_ Year: \_\_\_\_\_

Page 1 of 2

<p>This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".</p>	
<input type="checkbox"/> NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.	
<input type="checkbox"/> THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD	
<b>Permit Requirement</b> (specify permit condition #)	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	
<b>Permit Requirement</b> (specify permit condition #)	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	

<b>Permit Requirement</b> (specify permit condition #)	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	
<b>Permit Requirement</b> (specify permit condition #)	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	
<b>Permit Requirement</b> (specify permit condition #)	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	

Form Completed By: \_\_\_\_\_

Title/Position: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

Attach a signed certification to complete this report.

## Indiana Department of Environmental Management Office of Air Quality

### Addendum to the Technical Support Document for a Federally Enforceable State Operating Permit (FESOP)

Source Name: Magnesium Technologies Corp., d/b/a Rossborough  
 Source Location: 205 State Road 104, Walkerton, Indiana 46574  
 County: Saint Joseph  
 SIC Code: 3341  
 Operating Permit No.: 141-20655-00185  
 Permit Reviewer: Jenny Acker

On August 8, 2005, the Office of Air Quality (OAQ) had a notice published in the South Bend Tribune, South Bend, Indiana, stating that Magnesium Technologies Corp., d/b/a Rossborough, had applied for a Federally Enforceable State Operating Permit for a magnesium processing and packaging operation. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

Upon further review, the OAQ has decided to make the following revisions to the permit (bolded language has been added, the language with a line through it has been deleted).

1. The 326 IAC 6-3 revisions that became effective on June 12, 2002 were approved into the State Implementation Plan on September 23, 2005. These rules replace the previous version of 326 IAC 6-3 (Process Operations) that had been part of the SIP; therefore, the requirements of the previous version of 326 IAC 6-3-2 are no longer applicable to this source. Condition C.1 has been revised to remove (a) which contained these requirements. Since the requirements of the 326 IAC 6-3-2(d) that were effective June 12, 2002 are now federally enforceable, the last statement from C.1 has been removed.
- C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour ~~[40 CFR 52 Subpart P]~~ [326 IAC 6-3-2]
- 
- (a) ~~Pursuant to 40 CFR 52 Subpart P, the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 551 pounds per hour.~~
- (b) Pursuant to 326 IAC 6-3-2(e)(2), the allowable particulate emissions rate from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour. ~~This condition is not federally enforceable.~~

Written comments were received from Kevin Parks, Environmental Consultant for Magnesium Technologies Corp., d/b/a Rossborough, on August 28, 2005. These comments and IDEM, OAQ responses, including changes to the permit (where language deleted is shown with ~~strikeout~~ and language added is shown in **bold**) are as follows:

### Comment 1

The Authorized Individual is listed as "President". Mr. Dave Hostetler is the "General Manager" and is responsible for the facility. The President of the company works from the corporate office in Ohio. Is it more appropriate for Mr. Hostetler's position to be listed?

### Response 1

"Authorized individual" means an individual responsible for the overall operation of one (1) or more manufacturing, production, or operating plants or a duly authorized representative of such person. [326 IAC 2-1.1-1(1)]. It is left to the discretion of the source to determine the authorized individual. The GSD-01 General Source Data form submitted as part of Magnesium Technologies Corporation's Air permit application lists Thomas Grady, President, as the authorized individual. However, the application for this permit requires the Air Permit Application Cover Sheet to be submitted by the "authorized individual". The Air Permit Application Cover Sheet was submitted by Mr. Dave Hostetler, Plant Manager. Therefore, it would be more appropriate to list Mr. Hostetler's position. Condition A.1 has been revised as follows:

#### A.1 General Information [326 IAC 2-8-3(b)]

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The Permittee owns and operates a stationary magnesium processing and packaging operation.

Authorized individual:	<del>President</del> <b>General Manager</b>
Source Address:	205 State Road 104, Walkerton, Indiana 46574
Mailing Address:	PO Box 175, Walkerton, Indiana 46574-0175
General Source Phone:	(574) 586-9559
SIC Code:	3341
Source Location Status:	Saint Joseph
	Nonattainment for Ozone under the 8-hour standard
	Attainment for all other criteria pollutants
Source Status:	Federally Enforceable State Operating Permit (FESOP)
	Minor Source, under PSD, Emission Offset Rules;
	Minor Source, Section 112 of the Clean Air Act

### Comment 2

In Section A.2 (b) and the Corresponding descriptive box in Section D, the lime receiving silos each have a capacity of 150,000 pounds and not a total capacity of 150,000 pounds.

### Response 2

Condition A.2 has been revised as follows:

#### A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

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This stationary source consists of the following emission units and pollution control devices:

- (b) Two (2) Lime Receiving Silos, identified as S1 and S2, constructed in 2002, with a combined capacity of 19,000 pounds per hour and **each having a** storage capacity of 150,000 pounds, each controlled by one (1) of two (2) dust collectors for particulate control, identified as CF1 and CF2, and exhausting to the atmosphere.

Section D.1 has been revised as follows:

## SECTION D.1 FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-8-4(10)]:

- (b) Two (2) Lime Receiving Silos, identified as S1 and S2, constructed in 2002, with a combined capacity of 19,000 pounds per hour and **each having a** storage capacity of 150,000 pounds, each controlled by one (1) of two (2) dust collectors for particulate control, identified as CF1 and CF2, and exhausting to the atmosphere.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

### Comment 3

In Section A.2 (e) and the corresponding descriptive box in Section D, the throughput capacity of the lime storage vessels is 12,000 pounds per hour combined and not 16,000 pounds per hour. The difference of 4,000 pounds per hour is from magnesium powder that is purchased from offsite.

### Response 3

The throughput capacity of the lime storage vessels is limited by the capacity of the Whirlaire Flow Lime Blending Unit (BCL) which is located directly downstream from the lime storage vessels, not the planned production schedule. The BCL is capable of 16,000 pounds of material per hour and there are no enforceable requirements that would limit the lime storage vessels to less than 16,000 pounds per hour. No changes have been made.

### Comment 4

In Condition C.1 (1), the allowable emission rate should be 0.551 pounds per hour and not 551 pounds per hour.

### Response 4

In accordance with the 326 IAC 6-3 revisions, Condition C.1 has been revised as follows and no additional modifications are necessary:

#### C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour ~~[40 CFR 52 Subpart P]~~ [326 IAC 6-3-2]

- ~~(a) Pursuant to 40 CFR 52 Subpart P, the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 551 pounds per hour.~~
- (b) Pursuant to 326 IAC 6-3-2(e)(2), the allowable particulate emissions rate from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour. ~~This condition is not federally enforceable.~~

### Comment 5

Pages 36 and 37 of 37 list a compliance deviation report but I could not find a requirement in the permit to submit a compliance deviation report. I may have over-read it. Would you please point out the compliance deviation reporting condition or is it a presumed condition of the permit?

**Response 5**

Condition B.14 (Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(c)(ii)], requires the submittal of the Quarterly Deviation and Compliance Monitoring Report or its equivalent.

**Indiana Department of Environmental Management  
Office of Air Quality**

Technical Support Document (TSD) for a  
Federally Enforceable State Operating Permit (FESOP)

**Source Background and Description**

<b>Source Name:</b>	Magnesium Technologies Corp., d/b/a Rossborough
<b>Source Location:</b>	205 State Road 104, Walkerton, Indiana 46574
<b>County:</b>	St. Joseph
<b>SIC Code:</b>	3341
<b>Operation Permit No.:</b>	141-20655-00185
<b>Permit Reviewer:</b>	Jenny Acker

The Office of Air Quality (OAQ) has reviewed a FESOP application from Magnesium Technologies Corp., d/b/a Rossborough (Magnesium Technologies) relating to the operation of a magnesium processing and packaging operation.

**Previously Permitted Emission Units and Pollution Control Equipment**

The source consists of the following previously permitted emission units and pollution control devices:

- (a) Four (4) primary magnesium granulating lines rated at 1,000 pounds per hour each. A cyclone (one for each line) sizes the magnesium granules on the primary magnesium granulating lines. The stack identification is 1, 2, 3, 4, with a primary height of 16 feet and a diameter of 16 inches.
- (b) One (1) secondary magnesium granulating line rated at 342 pounds per hour. A wet dust collector controls the particulate matter from the secondary magnesium granulating line. The stack identification is 5 with a primary height of 14 feet and a diameter of 30 inches.
- (c) Blending of lime and granules (batch process 15,000, six batches per day). A wet dust collector controls the particulate matter from the blending process. The stack identification is 5 with a primary height of 14 feet and a diameter of 30 inches.
- (d) One (1) magnesium silo and two (2) lime silos. The process for loading and unloading of silos is controlled by a portable cartridge dust collector. The particulate collected is recycled with product.

**Unpermitted Emission Units and Pollution Control Equipment**

The source also consists of the following unpermitted emission units:

- (a) Two (2) Lime Receiving Silos, identified as S1 and S2, constructed in 2002, with a combined capacity of 19,000 pounds per hour and storage capacity of 150,000 pounds,

each controlled by one (1) of two (2) dust collectors for particulate control, identified as CF1 and CF2, and exhausting to the atmosphere.

- (b) Two (2) Lime Granulating and Screening Units, identified as LG1 and LG2, constructed in 2002, with a combined process capacity of 19,000 pounds per hour, controlled by one (1) dust collector for particulate control, identified as DF02-4-A, and exhausting to the atmosphere.
- (c) Five (5) Pig Storage Hoppers for Granulated Lime, identified as PS1 – PS5, constructed in 2002, with a combined capacity of 19,000 pounds per hour, and each having a storage capacity of 200,000 pounds, controlled by one (1) dust collector for particulate control, identified as CF3, and exhausting to atmosphere.
- (d) One (1) Whirlaire Flow Lime Blending Unit, identified as BCL, constructed in 1998, controlled by one (1) dust collector, identified as DF02-4-B, constructed in 2002, rated at 12,000 pounds per hour, and exhausting to atmosphere.

### **Removed Emission Units and Pollution Control Equipment**

- (a) One (1) magnesium granulating line, rated at 1,000 pounds per hour and associated cyclone.
- (b) One (1) secondary magnesium granulating line rated at 342 pounds per hour and associated wet dust collector.
- (c) One (1) magnesium silo.
- (d) One (1) blending of lime and magnesium granules (batch process 15,000, six batches per day) process and associated wet dust collector.

### **Permitted Emission Units and Pollution Control Equipment after Issuance**

- (a) Three (3) Primary Magnesium Granulating lines, identified as MgL1, MgL2, and MgL3, constructed in 1994, consisting of one (1) chipper and two (2) grinders per line, with a maximum capacity of 1,000 pounds per hour per line, each equipped with a one (1) of three (3) cyclones integral to the lines, identified as C1, C2, and C3, and exhausting to the atmosphere.
- (b) Two (2) Lime Receiving Silos, identified as S1 and S2, constructed in 2002, with a combined capacity of 19,000 pounds per hour and storage capacity of 150,000 pounds, each controlled by one (1) of two (2) dust collectors for particulate control, identified as CF1 and CF2, and exhausting to the atmosphere.
- (c) Two (2) Lime Granulating and Screening Units, identified as LG1 and LG2, constructed in 2002, with a combined process capacity of 19,000 pounds per hour, controlled by one (1) dust collector for particulate control, identified as DF02-4-A, and exhausting to the atmosphere.
- (d) Five (5) Pig Storage Hoppers for Granulated Lime, identified as PS1 – PS5, constructed in 2002, with a combined capacity of 19,000 pounds per hour, and each having a storage capacity of 200,000 pounds, controlled by one (1) dust collector for particulate control, identified as CF3, and exhausting to atmosphere.

- (e) Two (2) Lime Storage Vessels, identified as LSV1 and LSV2, constructed in 1994, with a combined capacity of 16,000 pounds per hour, and each having a storage capacity of 30,000 pounds, each controlled by one (1) of two (2) dust collectors for particulate control, identified as WB1 and DF02-2, constructed in 2002, and exhausting to atmosphere.
- (f) One (1) Whirlaire Flow Lime Blending Unit, identified as BCL, constructed in 1998, rated at 16,000 pounds per hour, controlled by one (1) dust collector for particulate control, identified as DF02-4-B, constructed in 2002, and exhausting to the atmosphere.
- (g) One (1) enclosed vehicle loading operation, rated at 16,000 pounds per hour, controlled by one (1) dust collector for particulate control, identified as DF02-4-B, constructed in 2002, and exhausting to the atmosphere.

### Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Equipment powered by internal combustion engines of capacity equal to or less than 500,000 Btu/hour, except where total capacity of equipment operated by one stationary source exceeds 2,000,000 Btu/hour.
- (b) A petroleum fuel, other than gasoline, dispensing facility having a storage capacity less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.
  - (1) One (1) 300 gallon above ground Diesel Fuel Tank.
- (c) Application of oils, greases, lubricants, or other nonvolatile materials applied as temporary protective coatings.
  - (1) Source maintenance activities.
- (d) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.
  - (1) Source maintenance activities.
- (e) Closed loop heating and cooling systems.
  - (1) Electric forced air heating and cooling systems.
- (f) Activities associated with the transportation and treatment of sanitary sewage, provided discharge to the treatment plant is under the control of the owner/operator, that is, an on-site sewage treatment facility.
  - (1) Enclosed subsurface septic system.
- (g) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (h) On-site fire and emergency response training approved by the department.
  - (1) "No open flame" training conducted for local emergency response agencies.
- (i) A laboratory as defined in 326 IAC 2-7-1(21)(D).
  - (1) QA/QC physical analysis laboratory.
- (j) Other categories with emissions below insignificant thresholds:
  - (1) One (1) 1,500 gallon Liquefied Nitrogen Tank.

- (2) Four (4) Argon Fire Suppression Systems using bottled Argon Cylinders.

### Existing Approvals

The source has been operating under the previous Registration Permit No.: CP 091-3626-00073, issued on June 17, 1994, expired on December 26, 2000, and the following amendment:

- (a) The application for CP 091-3626-00073 listed LaPorte county in the source location information, GSD-01 Part A. The source is located in St. Joseph county. Administrative Amendment No.: 141-10194-00185 was issued on January 19, 1999 to correct the plant ID to 141-00185.

### Air Pollution Control Justification as an Integral Part of the Process

The company has submitted the following justification such that the cyclones, identified as C1, C2, and C3 be considered as an integral part of the magnesium granulating lines:

- (a) The cyclones were determined to be an intergral part of the magnesium granulating lines pursuant to the issuance of Registration permit No: 091-3626-00073 and no changes have been made in the operation of the magnesium granulating lines since the determination.
- (b) The cyclones primary purpose isn't air pollution control. The cyclones serve as air separation devices prior to the final screening located at the base of the cyclones.

IDEM, OAQ has evaluated the justifications and agreed that the cyclones will be considered as an integral part of the magnesium granulating lines. Therefore, the permitting level will be determined using the potential to emit after the cyclones, identified as C1, C2, and C3, Conditions in the proposed permit will specify that these cyclones shall operate at all times when the magnesium granulating lines are in operation.

### Enforcement Issue

- (a) IDEM is aware that equipment has been constructed and operated prior to receipt of the proper permit. The subject equipment is listed in this Technical Support Document under the condition entitled "Unpermitted Emission Units and Pollution Control Equipment".
- (b) IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.
- (c) A document titled, *Changes in Indiana Air Permitting as of December 25, 1998*, was sent to all permitted sources within the state of Indiana on August 16, 1999. On November 30, 1999, a subsequent letter regarding New Source Review Reform and Compliance Schedules was sent to all sources within the state of Indiana operating with a Registration Permit or Minor Source Operating Permit. In accordance, Magnesium Technologies was to have applied for approval no later than December 26, 2000.

IDEM is aware that the source did not apply for approval in a timely manner. IDEM is reviewing this matter and will take appropriate action.

### Stack Summary

Stack ID	Operation	Height (ft)	Diameter (ft)	Flow Rate (acfm)	Temperature (°F)
C1	Mg Line 1	31.5	1.5	1,800	Ambient
C2	Mg Line 2	31.5	1.5	1,800	Ambient
C3	Mg Line 3	31.5	1.5	1,800	Ambient
CF1	Lime Receiving Silo S1	40	1	500	Ambient
CF2	Lime Receiving Silo S2	40	1	500	Ambient
DF02-4-A	Lime Transfer from Grinders/Screens	8	1	500	Ambient
CF3	Pig Storage Hoppers PS1 – PS2	16	1	500	Ambient
WB1	Lime Vessel 1	26	1	500	Ambient
DF02-2	Lime Vessel 2	26	1	500	Ambient
DF02-4-B	Blending Building Loading Operation	30	1	500	Ambient

### Recommendation

The staff recommends to the Commissioner that the FESOP be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete FESOP renewal application for the purposes of this review was received on February 1, 2005. Additional information was received on March 3, 2005.

### Emission Calculations

See Appendix A, pages 1 through 3, of this document for detailed emission calculations.

### Potential to Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA, the department, or the appropriate local air pollution control agency.”

Pollutant	Potential to Emit (tons/yr)
PM	385.88
PM10	375.39
SO <sub>2</sub>	neg
VOC	neg
CO	neg
NO <sub>x</sub>	neg

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM10 is equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 2-7. The

source will be issued a FESOP because the source will limit its emissions below the Title V levels.

- (b) Fugitive Emissions  
 Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

**Potential to Emit After Issuance**

The source has opted to be a FESOP source. The table below summarizes the potential to emit, reflecting all limits of the emission units. Any control equipment is considered enforceable only after issuance of this FESOP and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

Emission Unit ID Process Description	Potential To Emit (tons/year)						
	PM	PM-10	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	HAPs
MgL1 Magnesium Line 1	4.38	4.38	-	-	-	-	-
MgL2 Magnesium Line 2	4.38	4.38	-	-	-	-	-
MgL3 Magnesium Line 3	4.38	4.38	-	-	-	-	-
S1 Lime Receiving Silo 1	0.92	0.92	-	-	-	-	-
S2 Lime Receiving Silo 2			-	-	-	-	-
LG1 Lime Granulating & Screening Unit 1	0.142	0.04	-	-	-	-	-
LG2 Lime Granulating & Screening Unit 2			-	-	-	-	-
PS1 – PS5 Pig Storage Hoppers	0.92	0.92	-	-	-	-	-
LSV1 Lime Storage Vessel 1	0.77	0.77	-	-	-	-	-
LSV2 Lime Storage Vessel 2			-	-	-	-	-
BLC Whirlaire Blending Unit	0.77	0.77	-	-	-	-	-
Vehicle Loading	0.21	0.21	-	-	-	-	-
Insignificant Activities	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Total Emissions	16.87	16.77	Neg.	Neg.	Neg.	Neg.	Neg.

The following citation requires the air pollution control equipment be operational. The manufacturer cites 99.0% efficiency. This will limit the PM and PM-10 emissions as described in the table above. The PTE was calculated at maximum process rate and for a time period of 8760 hours per year. Therefore, no additional limitations on operating time or process parameters will be required.

- (a) Pursuant to 326 IAC 2-8-5, all air pollution control equipment listed in the permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.
- (b) Pursuant to 326 IAC 2-8, PM-10 will be emitted at levels less than 100 tpy.
- (c) Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration), PM will be emitted at levels less than 250 tpy.

### County Attainment Status

The source is located in Saint Joseph County.

Pollutant	Status
PM10	Attainment
PM2.5	Attainment
SO <sub>2</sub>	Attainment
NO <sub>2</sub>	Attainment
1-hour Ozone	Attainment
8-hour Ozone	Basic Nonattainment
CO	Attainment
Lead	Attainment

- (a) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to the ozone standards. Saint Joseph County has been designated as nonattainment for the 8-hour ozone standard. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.
- (b) Saint Joseph County has been classified as attainment or unclassifiable for PM10, SO<sub>2</sub>, 1-hour Ozone, NO<sub>2</sub>, CO and Lead. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (c) Saint Joseph County has been classified as attainment or unclassifiable for PM2.5. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM2.5 emissions. Therefore, until the U.S.EPA adopts specific provisions for PSD review for PM2.5 emissions, it has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions.
- (d) Fugitive Emissions  
Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 or 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

## Source Status

Existing Source PSD, Part 70, or FESOP Definition (emissions after controls, based on 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/yr)
PM	Less than 250
PM10	Less than 100
SO <sub>2</sub>	Less than 100
VOC	Less than 100
CO	Less than 100
NO <sub>x</sub>	Less than 100
Single HAP	Less than 10
Total HAPs	Less than 25

- (a) This source is not a major stationary source because no attainment regulated pollutant is emitted at a rate equal to or greater than 250 tons per year and no nonattainment regulated pollutant is emitted at rate equal to or greater than 100 tons per year, and it is not 1 of the 28 listed source categories.

## Federal Rule Applicability

### NSPS

- (a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) applicable to this source.

U.S.EPA Region 3 Determination Control Number 0400016, authored by Michael Alushin and dated November 18, 2003, states "equipment used to process lime product is not subject to New Source Performance Standards (NSPS) subpart OOO". Therefore New Source Performance Standard 326 IAC 12, 40 CFR 60.670 through 60.676, Subpart OOO (Standards of Performance for Non-Metallic Mineral Processing Plants) shall not apply.

### NESHAP

- (a) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP)(326 IAC 14, 20 and 40 CFR Part 61, 63) applicable to this source.

## State Rule Applicability – Entire Source

### 326 IAC 2-2 (Prevention of Significant Deterioration)

This FESOP will limit PM10 Emissions to below one hundred (100) tons per year. The source has also chosen to limit PM emissions to below two hundred and fifty (250) tons per year. Therefore, 326 IAC 2-2 (Prevention of Significant Deterioration) will not be applicable. The source has chosen to limit the PM emissions as follows:

- (a) Particulate matter emissions from the three (3) Magnesium Granulating Lines (MgL1, MgL2, and MgL3) shall not exceed 1.00 pounds per hour each.
- (b) Particulate matter emissions from the two (2) Lime Receiving Silos (S1 and S2) shall not exceed 2.10 pounds per hour combined.

- (c) Particulate matter emissions from the two (2) Lime Granulating and Screening Units (LG1 and LG2) exhausted to Stack M shall not exceed 0.16 pounds per hour.
- (d) Particulate matter emissions from the five (5) Pig Storage Hoppers (PS1 – PS5) shall not exceed 4.26 pounds per hour.
- (e) Particulate matter emissions from the two (2) Lime Storage Vessels (LSV1 and LSV2) shall not exceed 3.48 pounds per hour combined.
- (f) Particulate matter emissions from the one (1) Whirlaire Flow Lime Blending Unit (BCL) shall not exceed 3.48 pounds per hour.
- (g) Particulate matter emissions from the one (1) enclosed vehicle loading operation shall not exceed 1.00 pounds per hour.
- (h) Compliance with these limits renders the requirements of 326 IAC 2-2 not applicable.

The source will be in compliance by using the dust collectors and cyclones at all times during process operations.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

Magnesium Technologies will emit less than 10 tons per year of a single HAP or 25 tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 2-8 (PM10 FESOP Minor Limit)

Pursuant to 326 IAC 2-8, the source has chosen to limit PM10 Emissions to below 100 tons per year. Therefore, 326 IAC 2-7 (Part 70 Permit Program) will not be applicable

The source will be in compliance with this PM10 limit by limiting the controlled units to less than a total of 51.00 tons per twelve (12) consecutive month period. The source has chosen to limit the controlled units as follows:

Unit	PM10 (pounds per hour)	PM10 (tons per year)
Magnesium Granulating Line 1 (MgL1)	1.00	4.38
Magnesium Granulating Line 2 (MgL2)	1.00	4.38
Magnesium Granulating Line 3 (MgL3)	1.00	4.38
Lime Receiving Silo 1 (S1)	2.13	9.32
Lime Receiving Silo 1 (S2)		
Lime Granulating and Screening Units (LG1 and LG2)	0.08	0.37
Pig Storage Hopper (PS1-PS5)	2.13	9.32
Lime Storage Vessel 1 (LSV1)	1.79	7.85
Lime Storage Vessel 2 (LSV2)		
Whirlaire Flow Blending (BCL)	1.79	7.85
Vehicle Loading	0.50	2.18
Total Emissions		50.03

The cyclones, C1, C2, and C3, shall be in operation at all times the Magnesium Granulating Lines are in operation in order to comply with this limit.

The dust collectors, CF1, CF2, CF3, WB1, DF02-2, DF02-4-A, and DF02-4-B shall be in operation at all times the Lime Granulating Line and the Blending Lines and Vehicle Loading are in operation in order to comply with this limit.

**326 IAC 5-1 (Opacity Limitations)**

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in the permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

**326 IAC 5-1-1 (Opacity Limitations)**

Magnesium Technologies is not located north of Kern Road and East of Pine Road. Therefore, 326 IAC 5-1-2(2) does not apply.

**State Rule Applicability – Individual Facilities**

**326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)**

The particulate matter (PM) from the Magnesium Grinding Lines 1, 2, and 3; the Lime Granulating Line; the Blending Line, and Vehicle Loading shall be limited by the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour and  
P = process weight rate in tons per hour

The emissions rate E has been established for the units as follows:

Process Description (Emission Units)	Process Weight Rate (tons/hr)	PM Emission (lb/hr)
Magnesium Granulating Line 1 (MgL1)	0.50	2.58
Magnesium Granulating Line 2 (MgL2)	0.50	2.58
Magnesium Granulating Line 3 (MgL3)	0.50	2.58
Lime Receiving Silo 1 (S1)	9.50	18.53
Lime Receiving Silo 1 (S2)		
Lime Granulating and Screening Units (LG1 and LG2)		
Pig Storage Hopper (PS1-PS5)	9.50	18.53
Lime Storage Vessel 1 (LSV1)	8.00	16.51
Lime Storage Vessel 2 (LSV2)		
Whirlaire Flow Blending (BCL)		
Vehicle Loading		

The cyclones, C1, C2, and C3, shall be in operation at all times the Magnesium Granulating Lines are in operation in order to comply with this limit.

The dust collectors, CF1, CF2, CF3, WB1, DF02-2, DF02-4-A, and DF02-4-B shall be in operation at all times the Lime Granulating Line and the Blending Lines and Vehicle Loading are in operation in order to comply with this limit.

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

The particulate matter (PM) from the insignificant activities of brazing, cutting, soldering, remaining welding shall be limited to the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and } P = \text{process weight rate in tons per hour}$$

**Compliance Requirements**

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also in Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for

enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

1. The emission units MgL1, MgL2, MgL3, S1, S2, LG1, LG2, PS1-PS5, LSV1, LSV2, and BCL have applicable compliance monitoring conditions as specified below:
  - (a) Once per day visible emission notations of the cyclones C1, C2, C3 and the dust collectors CF1, CF2, DF02-4-A, CF3, WB1, DF02-2, and DF02-4-B exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting start up or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C – Compliance Response Plan – Preparation and Implementation shall be considered a deviation from this permit.
  - (b) The Permittee shall record the total static pressure drop across the dust collectors CF1, CF2, DF02-4-A, CF3, WB1, DF02-2, and DF02-4-B controlling the Lime Receiving Silos (S1 and S2); the Lime Granulating and Screening Units (LG1 and LG2); the Pig Storage Hoppers (PS1-PS5); the Lime Storage Vessels (LSV1 and LSV2); the Whirlaire Flow Lime Blending Unit (BCL), and Vehicle Loading at least one per day when the Lime Granulating Line, the Blending Line, and Vehicle Loading are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 0.5 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C – Compliance Response Plan – Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation of this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan – Preparation, Implementation shall be considered a deviation from this permit.

These monitoring conditions are necessary because:

The cyclones for the Magnesium Granulating Lines (MgL1, MgL2, MgL3) must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations) and 326 IAC 2-7 (Part 70).

The dust collectors for the Lime Receiving Silos (S1, S2), the Lime Granulating & Screening Units (LS1, LG2), the Pig Storage Hoppers (PS1-PS5), the Lime Storage Vessels (LSV1 and LSV2), the Whirlaire Flow Lime Blending Unit (BCL), and the Vehicle Loading must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations) and 326 IAC 2-7 (Part 70).

## **Air Quality Impacts from Minor Sources**

### **Modeling Overview**

Pursuant to 326 IAC 2-1.1-5, IDEM, OAQ, has conducted a modeling analysis of the Limited Potential to Emit (PTE) criteria pollutants from this proposed source to estimate whether the Limited PTE criteria pollutants will cause or contribute to a violation of any National Ambient Air Quality Standard (NAAQS).

#### **Modeling Results – Criteria Pollutants**

- (a) The modeling results indicate that all of the Limited PTE criteria pollutants from this source except Particulate Matter less than 10 micron in diameter (PM10) will not cause or contribute to a violation of any National Ambient Air Quality Standard (NAAQS).
- (b) The PM10 modeling results indicate that without additional measures the emissions levels may violate the PM10 24 hour concentration and the PM10 annual concentration air quality standard. Magnesium Technologies has raised the heights of stacks, C1, C2, and C3 from 16 to 31.5 feet above ground level to avoid potential violations of the NAAQS for this pollutant.
- (c) The potential to emit of PM10 from each stack is less than twenty-five (25) tons per year. Therefore, 326 IAC 1-7(Stack Height Applicability) is not applicable.

#### **Conclusion**

The operation of this magnesium processing and packaging operation shall be subject to the conditions of the FESOP 141-20655-00185.

**Appendix A: Emissions Calculations  
Summary of Emissions**

**Company Name:** Magnesium Technologies Corp., d/b/a Rossbrough  
**Address City IN Zip:** 205 State Road 104  
**Permit Number:** 141-20655  
**Plt ID:** 141-00185  
**Reviewer:** Jenny Acker  
**Date:** 3/7/2005

		PM PTE Uncontrolled		PM PTE Controlled (tpy)	Thoughtput (tons/hour)	PM Limited PTE 326 IAC 6-3-2 (lbs/hr)	<sup>1)</sup> PM PSD Minor Limit PTE 326 IAC 2-2	
		(lbs/hr)	(tpy)				(lbs/hr)	(tpy)
MgL1 (Magnesium Granluating Line 1)	C1	1.00	4.38	4.38	0.50	2.58	10.00	43.80
MgL2 (Magnesium Granluating Line 2)	C2	1.00	4.38	4.38	0.50	2.58	10.00	43.80
MgL3 (Magnesium Granluating Line 3)	C3	1.00	4.38	4.38	0.50	2.58	10.00	43.80
S1 (Lime Storage Silo 1)	CF1	20.90	91.54	0.92	9.50	18.53	2.09	9.15
S2 (Lime Storage Silo 2)	CF2							
LG1 (Granulating & Screening)	DF02-4-A	3.22	14.11	0.14			0.32	1.41
LG2 (Granulating & Screening)								
PS1-PS5 (Pig Storage Hoppers)	CF3	20.90	91.54	0.92	9.50	18.53	2.09	9.15
LSV1 (Lime Storage Vessels 1)	WB1	17.60	77.09	0.77	8.00	16.51	1.76	7.71
LSV2 (Lime Storage Vessels 2)	DF02-2							
Whirlaire Flow Lime Blending Unit (BCL)	DF02-4-B	17.60	77.09	0.77			1.76	7.71
Closed Vehicle Loading	DF02-4-B	4.88	21.37	0.21			0.49	2.14
<b>Totals</b>		<b>88.10</b>	<b>385.88</b>	<b>16.87</b>		<b>61.30</b>	<b>38.51</b>	<b>168.67</b>

		PM10 PTE Uncontrolled		PM10 PTE Controlled (tpy)	<sup>2)</sup> PM10 Limited PTE FESOP Minor (2-8)	
		(lbs/hr)	(tpy)		(lbs/hr)	(tpy)
MgL1 (Magnesium Granluating Line 1)	C1	1.00	4.38	4.38	1.00	4.38
MgL2 (Magnesium Granluating Line 2)	C2	1.00	4.38	4.38	1.00	4.38
MgL3 (Magnesium Granluating Line 3)	C3	1.00	4.38	4.38	1.00	4.38
S1 (Lime Storage Silo 1)	CF1	20.90	91.54	0.92	2.13	9.32
S2 (Lime Storage Silo 2)	CF2					
LG1 (Granulating & Screening)	DF02-4-A	0.83	3.62	0.04	0.08	0.37
LG2 (Granulating & Screening)						
PS1-PS5 (Pig Storage Hoppers)	CF3	20.90	91.54	0.92	2.13	9.32
LSV1 (Lime Storage Vessels 1)	WB1	17.60	77.09	0.77	1.79	7.85
LSV2 (Lime Storage Vessels 2)	DF02-2					
Whirlaire Flow Lime Blending Unit (BCL)	DF02-4-B	17.60	77.09	0.77	1.79	7.85
Closed Vehicle Loading	DF02-4-B	4.88	21.37	0.21	0.50	2.18
<b>Totals</b>		<b>85.71</b>	<b>375.39</b>	<b>16.76</b>	<b>11.42</b>	<b>50.02</b>

<sup>1)</sup> PM PSD Minor Limit determined by multiplying the controlled PTE (lb/hr) by a factor of ten

<sup>2)</sup> PM10 FESOP (326 IAC 2-8) limit determined by limiting the controlled units to 50 tpy and applying a ratio to the controlled PTE.

The source has requested the above limits in order to allow for possible future expansion without having to adjust the limits.

**Appendix A: Emissions Calculations  
PM Emission Calculation**

**Company Name:** Magnesium Technologies Corp., d/b/a Rossbrough  
**Address City IN Zip:** 205 State Road 104  
**Permit Number:** 141-20655  
**Pit ID:** 141-00185  
**Reviewer:** Jenny Acker  
**Date:** 3/7/2005

Emission Unit ID (Process Description)	Control Device	Capacity (tons processed per hour)	Emission Factor (lbs of PM per ton of material processed)	Potential to Emit PM (lbs/hr)	Potential to Emit PM (tons/year)	Control Efficiency (%)	Controlled PM Emissions (lb/hr)	Controlled PM Emissions (tons/year)
<sup>(1)</sup> Unloading Material (SCC 3-05-016-15) S1 (Lime Storage Silo 1) S2 (Lime Storage Silo 2)	CF1	Combined	9.50	2.20	20.90	91.54	99.0%	0.21
	CF2							
<sup>(2)</sup> Crushing Material (SCC 3-05-020-05) LG1 & LG2 - Secondary Crushing	DF02-4-A	Combined	9.50	0.039	0.37	1.62	99.0%	3.71E-03
<sup>(2)</sup> Screening Material (SCC 3-05-020-021) LG1 & LG2 - Screening	DF02-4-A	Combined	9.50	0.30	2.85	12.48	99.0%	2.85E-02
<sup>(1)</sup> Conveying Material (SCC 3-05-016-05) PS1-PS5 (Pig Storage Hoppers) LSV1 (Lime Storage Vessels 1) LSV2 (Lime Storage Vessels 2) Whirlaire Flow Lime Blending Unit (BCL)	CF3	Combined	9.50	2.20	20.90	91.54	99.0%	0.21
	WB1							
	DF02-2							
<sup>(1)</sup> Loading Material (SCC 3-05-016-26) Closed Vehicle Loading	DF02-4-B	Combined	8.00	2.20	17.60	77.09	99.0%	0.18
	DF02-4-B		8.00	0.61	4.88	21.37	99.0%	0.0488
<b>Total Emissions</b>					<b>85.10</b>	<b>372.74</b>		<b>0.85</b>
								<b>3.73</b>

**Methodology**

Potential to Emit PM Emissions (lb/hr) = Operating Flow Rate (tons/hour) \* Emission Factor (lbs of PM per ton of material processed)

Potential to Emit PM Emissions (tpy) = Controlled Potential PM Emissions (lb/hr) \* ton/2000 lbs \* 8760 hrs/yr

Controlled PM Emissions (lb/hr) = Potential to Emit PM Emissions (lb/hr) \* (1-efficiency)

Controlled PM Emissions (tpy) = Potential to Emit PM Emissions (tpy) \* (1-efficiency)

<sup>(1)</sup> Emission Factors from AP 42, Chapter 11.17 Fifth Edition, 1998 (Table 11.17-4)

<sup>(2)</sup> Emission Factors from AP 42, Chapter 11.19.2 Fifth Edition, Updated August 2004 (Table 11.19.2-2) referred to by AP-42 Chapter 11.17 as more recent and representative for crushing, grinding and screening operations.

**Appendix A: Emissions Calculations  
PM10 Emission Calculation**

**Company Name:** Magnesium Technologies Corp., d/b/a Rossbrough  
**Address City IN Zip:** 205 State Road 104  
**Permit Number:** 141-20655  
**Pit ID:** 141-00185  
**Reviewer:** Jenny Acker  
**Date:** 3/7/2005

Emission Unit ID (Process Description)	Control Device	Capacity (tons processed per hour)	Emission Factor (lbs of PM10 per ton of material processed)	Potential to Emit PM10 (lbs/hr)	Potential to Emit PM10 (tons/year)	Control Efficiency (%)	Controlled PM10 Emissions (lb/hr)	Controlled PM10 Emissions (tons/year)	
<sup>(1)</sup> Unloading Material (SCC 3-05-016-15) S1 (Lime Storage Silo 1) S2 (Lime Storage Silo 2)	CF1 CF2	Combined	9.50	2.20	20.90	91.54	99.0%	0.21	0.92
<sup>(2)</sup> Crushing Material (SCC 3-05-020-05) LG1 & LG2 - Fine Crushing	DF02-4-A	Combined	9.50	0.015	0.14	0.62	99.0%	1.43E-03	6.24E-03
<sup>(2)</sup> Screening Material (SCC 3-05-020-021) LG1 & LG2 - Screening	DF02-4-A	Combined	9.50	0.072	0.68	3.00	99.0%	6.84E-03	3.00E-02
<sup>(1)</sup> Conveying Material (SCC 3-05-016-05) PS1-PS5 (Pig Storage Hoppers) LSV1 (Lime Storage Vessels 1) LSV2 (Lime Storage Vessels 2) Whirlaire Flow Lime Blending Unit (BCL)	CF3	Combined	9.50	2.20	20.90	91.54	99.0%	0.21	0.92
	WB1 DF02-2	Combined	8.00	2.20	17.60	77.09	99.0%	0.18	0.77
	DF02-4-B		8.00	2.20	17.60	77.09	99.0%	0.18	0.77
<sup>(1)</sup> Loading Material (SCC 3-05-016-26) Closed Vehicle Loading	DF02-4-B		8.00	0.61	4.88	21.37	99.0%	0.0488	0.21
<b>Total Emissions</b>					<b>82.71</b>	<b>362.25</b>		<b>0.83</b>	<b>3.62</b>

**Methodology**

Where specific emission factors for PM10 were not available, PM10 assumed to be equal to PM.

Potential to Emit PM-10 Emissions (lb/hr) = Operating Flow Rate (tons/hour) \* Emission Factor (lbs of PM-10 per ton of material processed)

Potential to Emit PM-10 Emissions (tpy) = Controlled Potential PM-10 Emissions (lb/hr) \* ton/2000 lbs \* 8760 hrs/yr

Controlled PM-10 Emissions (lb/hr) = Potential to Emit PM-10 Emissions (lb/hr) \* (1-efficiency)

Controlled PM-10 Emissions (tpy) = Potential to Emit PM-10 Emissions (tpy) \* (1-efficiency)

<sup>(1)</sup> Emission Factors from AP 42, Chapter 11.17 Fifth Edition, 1998 (Table 11.17-4)

<sup>(2)</sup> Emission Factors from AP 42, Chapter 11.19.2 Fifth Edition, Updated August 2004 (Table 11.19.2-2) referred to by AP-42 Chapter 11.17 as more recent and representative for crushing, grinding and screening operations.

**Appendix A: Emissions Calculations  
Magnesium Grinding Line Emission Calculation**

**Company Name:** Magnesium Technologies Corp., d/b/a Rossbrough  
**Address City IN Zip:** 205 State Road 104  
**Permit Number:** 141-20655  
**Plt ID:** 141-00185  
**Reviewer:** Jenny Acker  
**Date:** 3/7/2005

Emission Unit / Description	Annual Operating Hours	Capacity (pounds per hour)	Cyclone Efficiency (%)	Potential PM/PM-10 Emissions (lb/hr)	Potential PM/PM-10 Emissions (tpy)
MgL1	8760	1000	99.90%	1.00	4.38
MgL2	8760	1000	99.90%	1.00	4.38
MgL3	8760	1000	99.90%	1.00	4.38
<b>Total Potential to Emit</b>				<b>3.00</b>	<b>13.14</b>

Cyclones are integral to process. Therefore, the Potential to Emit is calculated after control efficiency.

**Methodology**

Potential PM/PM-10 (lb/hr) = Capacity (tons/hour) \* (1-Efficiency of Cyclones)

Potential PM/PM-10 (tpy) = Potential PM/PM-10 (tpy) \* 8760 (hrs/yr) / 2000 (lbs/tons)

PM-10 emissions are equivalent to PM emissions