



Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

TO: Interested Parties / Applicant
DATE: April 20, 2006
RE: Reed Minerals - Plt 14 / 089-22517-00107
FROM: Nisha Sizemore
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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Mr. Russ Simcox
Reed Minerals – Plant 14
P.O. Box 9159
Highland, Indiana 46322

April 20, 2006

Re: 089-22517-00107
First Significant Revision to
FESOP No. 089-16215-00107

Dear Mr. Simcox:

Reed Minerals – Plant 14 was issued a Federally Enforcement State Operating Permit (FESOP) on August 9, 2004, for a stationary slag processing plant and a portable slag processing plant. A letter requesting changes to this permit was received on January 10, 2006. Pursuant to the provisions of 326 IAC 2-8-11.1 a significant permit revision to this permit is hereby approved as described in the attached Technical Support Document.

The modification consists of revising the PM and PM10 emission limitations for the portable slag processing plant's existing rotary dryer (identified as P001) pursuant to 326 IAC 2-8 (FESOP) from 1.0 pound per hour to 6.5 pounds per hour, revising the PM and PM10 emission limitations for the stationary slag processing plant's enclosed dry slag processing area pursuant to 326 IAC 2-8 (FESOP) from 9.0 pound per hour to 3.5 pounds per hour, shutting down existing baghouse CEE02, rerouting emissions from conveyors and screening operations under the portable slag processing plant to existing baghouse CEE01, removing one (1) natural gas-fired fluid-bed dryer (identified as P01) used in conjunction with the stationary slag processing plant, and constructing one (1) natural gas-fired rotary bed dryer (identified as P01) to be used in conjunction with the stationary slag processing plant.

Furthermore, after extensive evaluation and deliberation, IDEM, OAQ has concluded that certain permit conditions that are routinely appealed in FESOPs could be altered in a manner that would be less burdensome on the Permittee but would still ensure that sources can demonstrate compliance with State and Federal Regulations on a continuous basis. Reed Minerals – Plant 14 has agreed that such changes should be made to their existing permit. These changes, including the relaxation of compliance monitoring frequency, are being made, pursuant to 326 IAC 2-8-11.1(f). Additional changes have been made to the permit as a result of administrative changes and changes to federal and state regulations.

The following construction conditions are applicable to the proposed project:

1. General Construction Conditions
The data and information supplied with the application shall be considered part of this source modification approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Quality (OAQ).
2. This approval 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 there-under, as well as other applicable local, state, and federal requirements.

3. Effective Date of the Permit
Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.
4. Pursuant to 326 IAC 2-1.1-9 (Revocation), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.
5. All requirements and conditions of this approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.

Pursuant to 326 IAC 2-8-11.1, this permit shall be revised by incorporating the significant permit revision into the permit. All other conditions of the permit shall remain unchanged and in effect. Please find attached a copy of revised permit.

Pursuant to Contract No. A305-5-65, IDEM, OAQ has assigned the processing of this application to Eastern Research Group, Inc., (ERG). Therefore, questions should be directed to Sanobar Durrani, ERG, 1600 Perimeter Park Drive, Morrisville, North Carolina 27560, or call (919) 468-7810 to speak directly to Ms. Durrani. Questions may also be directed to Duane Van Laningham at IDEM, OAQ, 100 North Senate Avenue, Indianapolis, Indiana, 46204-2251, or call (800) 451-6027 and ask for Duane Van Laningham or extension 3-6878, or dial (317) 233-6878.

Sincerely,
Original signed by Nisha Sizemore for

Paul Dubenetzky, Assistant Commissioner
Office of Air Quality

Attachments
ERG/SD

cc: File – Lake County
U.S. EPA, Region V
Lake County Health Department
Gary Department of Environmental Affairs
Northwest Regional Office
Compliance Data Section
Administrative and Development
Technical Support and Modeling – Michele Boner
Air Compliance Section Inspector – Rick Massoels



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**A NEW SOURCE REVIEW AND A
FEDERALLY ENFORCEABLE STATE
OPERATING PERMIT (FESOP)
OFFICE OF AIR QUALITY
AND
GARY DEPARTMENT OF ENVIRONMENTAL AFFAIRS**

**Reed Minerals – Plant 14
7100 West 9th Avenue
Gary, Indiana 46406**

(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. This permit also addresses new source review requirements and is intended to fulfill the new source review procedures and permit revision requirements pursuant to 326 IAC 2-8-11.1, applicable to those conditions.

Operation Permit No.: F089-16215-00107	
Issued by: Original Signed by Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: August 9, 2004 Expiration Date: August 9, 2009

First Administrative Amendment No.: 089-20294-00107, issued on December 23, 2004
Second Administrative Amendment No.: 089-21212-00107, issued on July 1, 2005

First Significant Permit Revision No.: 089-22517-00107	Pages Modified: Sections D.1 through D.3
Original signed by Nisha Sizemore for: Paul Dubenetzky, Assistant Commissioner Office of Air Quality	Issuance Date: April 25, 2006 Expiration Date: August 9, 2009

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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) and Gary Department of Environmental Affairs (GDEA). The information describing the source contained in conditions A.1, A.3, and A.4 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)]

The Permittee owns and operates a stationary slag processing plant and a portable slag processing plant.

Authorized individual:	Vice-President of Operations - Reed Minerals
Source Address:	7100 West 9 th Avenue, Gary Indiana 46406
Mailing Address:	P.O. Box 9159, Highland, IN 46322
General Source Phone:	(219) 944-6250
SIC Code:	3295
County Location:	Lake
Source Location Status:	Nonattainment for 1-hour and 8-hour Ozone, PM _{2.5} , and SO ₂
Source Status:	Attainment for all other criteria pollutants Federally Enforceable State Operating Permit (FESOP) Minor Source, under PSD, Emission Offset Rules, and Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

A.2 Source Definition [326 IAC 2-8-1] [326 IAC 2-7-1(22)]

This slag processing company consists of two (2) plants at this location:

- (a) Reed Minerals – Plant 14 (Plant ID: #089-00107), a stationary slag processing plant, located at 7100 West 9th Avenue, Gary, Indiana 46406 (SIC: 3295), receiving boiler slag from power plants and producing roofing granules and abrasive grit; and
- (b) Reed Minerals Portable Plant (Plant ID: #089-05242), a portable slag processing plant, located at 7100 West 9th Avenue, Gary, Indiana 46406 (SIC: 3295), processing blast furnace slag and producing roofing granules.

Since the two (2) plants are located on the same property, have the same SIC codes, and are owned by one (1) company, they will be considered one (1) source, effective from the date of issuance of this FESOP.

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

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

Stationary slag processing plant #089-00107, consisting of the following:

- (a) One (1) natural gas-fired rotary dryer, identified as P01 and constructed in 2006, with a maximum heating capacity of 27 MMBtu/hr and a maximum throughput rate of 65 tons of coal slag per hour. This facility is equipped with a wet scrubber (identified as #14-001) for particulate control, which exhausts through stack E001.
- (b) One (1) enclosed dry slag processing area, constructed in 1990, with a maximum throughput rate of 65 tons of coal slag per hour, using a baghouse (identified as #14-002) for particulate control, which exhausts through stack E002. This area consists of the following:

- (1) Three (3) crushers, identified as P03.
 - (2) Thirteen (13) screens, identified as P04.
 - (3) Eight (8) bucket elevators, identified as M01.
 - (4) One (1) conveying system, identified as M05, consisting of eleven (11) conveyors.
 - (5) Six (6) blend silos, identified as M03.
 - (6) Three (3) roofing silos, identified as M06.
 - (7) Eight (8) blasting silos, identified as M04.
- (c) One (1) raw slag handling operation, constructed in 1990, with a maximum throughput rate of 75 tons of coal slag per hour, consisting of the following:
- (1) One (1) loading hopper.
 - (2) Three (3) conveyor transfer points.
 - (3) One (1) initial screening operation.

Portable slag processing plant #089-05242, consisting of the following:

- (a) One (1) portable slag processing plant for roofing granule production, constructed in 2004, with a maximum throughput rate of 25 tons of slag per hour, consisting of the following:
- (1) One (1) feed hopper.
 - (2) Two (2) conveyors to the dryer, identified as M001 and M002.
 - (3) One (1) natural gas-fired rotary dryer, identified as P001, with a maximum heat input capacity of 12 MMBtu/hr, controlled by baghouse CE001, and exhausting through stack S001.
 - (4) One (1) conveyor to chute, identified as M003, controlled by baghouse CE001, and exhausting through stack S001.
 - (5) One (1) chute to the screen, identified as M004, controlled by baghouse CE001, and exhausting through stack S001.
 - (6) One (1) Tayler screen, identified as P002, controlled by baghouse CE001, and exhausting through stack S001.
 - (7) One (1) conveyor to the bucket elevator, identified as M005, controlled by baghouse CE001, and exhausting through stack S001.
 - (8) One (1) QC screen, identified as M006, controlled by baghouse CE001, and exhausting through stack S001.
 - (9) One (1) bucket elevator, identified as P003, controlled by baghouse CE001, and exhausting through stack S001.
 - (10) One (1) diesel fired generator, with a maximum power output of 300 horsepower (HP).

- (11) Two (2) bucket elevators, identified as P004 and P006, controlled by baghouse CE001, and exhausting through stack S001.
- (12) One (1) crusher, identified as P005, controlled by baghouse CE001, and exhausting through stack S001.

A.4 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) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.
- (b) Fuel oil-fired combustion sources with heat input equal to or less than two million (2,000,000) Btu per hour and firing fuel containing less than five-tenths (0.5) percent sulfur by weight.
- (c) Combustion source flame safety purging on startup.
- (d) A petroleum fuel (other than gasoline), dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.
- (e) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.
- (f) Refractory storage not requiring air pollution control equipment.
- (g) Paved and unpaved roads and parking lots with public access.
- (h) Purging of gas lines and vessels that is related to routine maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process.
- (i) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.
- (j) Purge double block and bleed valves.
- (k) Other emission units, not regulated by a NESHAP, with PM₁₀ and SO₂ emissions less than five (5) pounds per hour or twenty-five (25) pounds per day, CO emissions less than twenty-five (25) pounds per day, lead emissions less than six-tenths (0.6) tons per year or three and twenty-nine hundredths (3.29) pounds per day, and emitting greater than one (1) pound per day but less than five (5) pounds per day or one (1) ton per year of a single HAP, or emitting greater than one (1) pound per day but less than twelve and five tenths (12.5) pounds per day or two and five tenths (2.5) ton per year of any combination of HAPs:
 - (1) One (1) coal slag pile, with a maximum capacity of 150,000 tons.
 - (2) One (1) unsaleable pile, with a maximum capacity of 10,000 tons.
 - (3) One (1) fines storage pile.
 - (4) Five (5) slag storage tanks, constructed in 2004.

A.5 FESOP Applicability [326 IAC 2-8-2]

This 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) and GDEA for a Federally Enforceable State Operating Permit (FESOP).

A.6 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (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]

- (a) 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 of this permit.
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal 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, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

B.4 Term of Conditions [326 IAC 2-1.1-9.5]

Notwithstanding the permit term of a permit to construct, a permit to operate, or a permit modification, any condition established in a permit issued pursuant to a permitting program approved in the state implementation plan shall remain in effect until:

- (a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or
- (b) the emission unit to which the condition pertains permanently ceases operation.

B.5 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, GDEA, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

B.6 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.7 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.8 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.9 Duty to Provide Information [326 IAC 2-8-4(5)(E)]

- (a) The Permittee shall furnish to IDEM, OAQ and GDEA within a reasonable time, any information that IDEM, OAQ and GDEA 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 and GDEA copies of records required to be kept by this permit.

- (b) For information furnished by the Permittee to IDEM, OAQ and GDEA 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.10 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAQ, and GDEA 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.11 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.12 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 46204-2251

and

Gary Department of Environmental Affairs
839 North Broadway
Gary, Indiana 46402

- (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 and GDEA 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 and GDEA 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.13 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.
- (b) A copy of the PMPs shall be submitted to IDEM, OAQ and GDEA upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ and GDEA. IDEM, OAQ and GDEA 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 PMPs do not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) 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.14 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 Northwest Regional Office and GDEA within four (4) daytime business

hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

IDEM, OAQ:

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

Northwest Regional Office:

Telephone No.: 1-888-209-8892, or

Telephone No. 219-757-0265

Facsimile No.: 219-757-0267

Gary Department of Environmental Affairs

Telephone Number: 219-882-3000

Facsimile Number: 219-882-3012

- (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 46204-2251

and

Gary Department of Environmental Affairs

839 North Broadway

Gary, Indiana 46402

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) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or

contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(9) be revised in response to an emergency.

- (f) Failure to notify IDEM, OAQ and GDEA 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.15 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 46204-2251

and

Gary Department of Environmental Affairs
839 North Broadway
Gary, Indiana 46402

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.16 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]

- (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 and GDEA 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 and GDEA 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 and GDEA at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ and GDEA may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

B.17 Permit Renewal [326 IAC 2-8-3(h)]

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and GDEA, 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 46204-2251

and

Gary Department of Environmental Affairs
839 North Broadway
Gary, Indiana 46402

- (b) A timely renewal application is one that is:
 - (1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
 - (2) 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 and GDEA on or before the date it is due.

- (3) If IDEM, OAQ and GDEA 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) 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 and GDEA 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 and GDEA any additional information identified as needed to process the application.

B.18 Permit Amendment or Revision [326 IAC 2-8-10] [326 IAC 2-8-11.1]

- (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 46204-2251

and

Gary Department of Environmental Affairs
839 North Broadway
Gary, Indiana 46402

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)]

B.19 Operational Flexibility [326 IAC 2-8-15][326 IAC 2-8-11.1]

- (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 limitations provided in 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 46204-2251

and

Gary Department of Environmental Affairs
839 North Broadway
Gary, Indiana 46402

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

Such records shall consist of all information required to be submitted to IDEM, OAQ and GDEA 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 emissions increases and decreases at 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 and GDEA 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.20 Permit Revision Requirement [326 IAC 2-8-11.1]

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

B.21 Inspection and Entry [326 IAC 2-8-5(a)(2)][IC 13-14-2-2][IC 13-17-3-2][IC13-30-3-1]

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 and GDEA, 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.22 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 46204-2251

and

Gary Department of Environmental Affairs
839 North Broadway
Gary, Indiana 46402

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.23 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 and GDEA 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 and GDEA 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.24 Advanced Source Modification Approval [326 IAC 2-8-4(11)] [326 IAC 2-1.1-9]

- (a) The requirements to obtain a permit revision under 326 IAC 2-8-11.1 are satisfied by this permit for the proposed emission units, control equipment or insignificant activities in Sections A.3 and A.4.

- (b) Pursuant to 326 IAC 2-1.1-9 any permit authorizing construction may be revoked if construction of the emission unit has not commenced within eighteen (18) months from the date of issuance of the permit, or if during the construction work is suspended for a continuous period of one (1) year or more.

B.25 Credible Evidence [326 IAC 2-8-4(3)] [326 IAC 2-8-5] [62 FR 8314] [326 IAC 1-16]

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 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 volatile organic compounds (VOCs) from the entire source shall be limited to less than twenty-five (25) 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 regulated pollutant from the entire source, except particulate matter (PM) and volatile organic compounds (VOCs), shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period;
 - (3) 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
 - (4) 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), potential to emit particulate matter (PM) from the entire source shall be limited to less than two-hundred and 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.2 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 twenty percent (20%) 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.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

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

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

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.6 Fugitive Dust Emissions [326 IAC 6.8-10-3]

Pursuant to 326 IAC 6.8-10-3 (formerly 326 IAC 6-1-11.1) (Lake County Fugitive Particulate Matter Control Requirements), the particulate matter emissions from source wide activities shall meet the following requirements:

- (a) The average instantaneous opacity of fugitive particulate emissions from a paved road shall not exceed ten percent (10%).
- (b) The average instantaneous opacity of fugitive particulate emissions from an unpaved road shall not exceed ten percent (10%).
- (c) The average instantaneous opacity of fugitive particulate emissions from batch transfer shall not exceed ten percent (10%).
- (d) The opacity of fugitive particulate emissions from continuous transfer of material onto and out of storage piles shall not exceed ten percent (10%) on a three (3) minute average.
- (e) The opacity of fugitive particulate emissions from storage piles shall not exceed ten percent (10%) on a six (6) minute average.
- (f) There shall be a zero (0) percent frequency of visible emission observations of a material during the inplant transportation of material by truck or rail at any time.
- (g) The opacity of fugitive particulate emissions from the inplant transportation of material by front end loaders and skip hoists shall not exceed ten percent (10%).
- (h) There shall be a zero (0) percent frequency of visible emission observations from a building enclosing all or part of the material processing equipment, except from a vent in the building.
- (i) The PM₁₀ emissions from building vents shall not exceed twenty-two thousandths (0.022) grains per dry standard cubic foot and ten percent (10%) opacity.
- (j) The opacity of particulate emissions from dust handling equipment shall not exceed ten percent (10%).
- (k) Any facility or operation not specified in 326 IAC 6-1-11.1(d) shall meet a twenty percent (20%), three (3) minute average opacity standard.

The Permittee shall achieve these limits by controlling fugitive particulate matter emissions according to the Fugitive Dust Control Plan, submitted on January 24, 2003. This plan is attached as Attachment A.

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

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

(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 46204-2251

and

Gary Department of Environmental Affairs
839 North Broadway
Gary, Indiana 46402

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.9 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 and GDEA.

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 46204-2251

and

Gary Department of Environmental Affairs
839 North Broadway
Gary, Indiana 46402

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 and GDEA 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 and GDEA not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ and GDEA if the Permittee submits to IDEM, OAQ and GDEA 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.10 Compliance Requirements [326 IAC 2-1.1-11]

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.11 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 46204-2251

and

Gary Department of Environmental Affairs
839 North Broadway
Gary, Indiana 46402

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.12 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.13 Instrument Specifications [326 IAC 2-1.1-11][326 IAC 2-8-4(3)] [326 IAC 2-8-5(1)]

- (a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading shall be no less than twenty percent (20%) of full scale.
- (b) The Permittee may request that the IDEM, OAQ and GDEA approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

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

C.14 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

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 46204-2251

and

Gary Department of Environmental Affairs
839 North Broadway
Gary, Indiana 46402

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

The ERP does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) If the ERP is disapproved by IDEM, OAQ and GDEA the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.
- (d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.
- (e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.
- (f) Upon direct notification by IDEM, OAQ and GDEA that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.15 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68]

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.16 Response to Excursions or Exceedances [326 IAC 2-8-4] [326 IAC 2-8-5]

- (a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:
 - (1) initial inspection and evaluation;
 - (2) recording that operations returned to normal without operator action (such as through response by a computerized distribution control system); or
 - (3) any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
- (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:
 - (1) monitoring results;

- (2) review of operation and maintenance procedures and records;
- (3) inspection of the control device, associated capture system, and the process.
- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (e) The Permittee shall maintain the following records:
 - (1) monitoring data;
 - (2) monitor performance data, if applicable; and
 - (3) corrective actions taken.

C.17 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 and GDEA 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 and GDEA that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ and GDEA may extend the retesting deadline.
- (c) IDEM, OAQ and GDEA 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.18 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]

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

- (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 46204-2251

and

Gary Department of Environmental Affairs
839 North Broadway
Gary, Indiana 46402

- (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 and GDEA 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.

Stratospheric Ozone Protection

C.20 Compliance with 40 CFR 82 and 326 IAC 22-1

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 CONDITIONS

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

The stationary slag processing plant #089-00107, consisting of the following:

- (a) One (1) natural gas-fired rotary dryer, identified as P01 and constructed in 2006, with a maximum heating capacity of 27 MMBtu/hr and a maximum throughput rate of 65 tons of coal slag per hour. This facility is equipped with a wet scrubber (identified as #14-001) for particulate control, which exhausts through stack E001.
- (b) One (1) enclosed dry slag processing area, constructed in 1990, with a maximum throughput rate of 65 tons of coal slag per hour, using a baghouse (identified as #14-002) for particulate control, which exhausts through stack E002. This area consists of the following:
 - (1) Three (3) crushers, identified as P03.
 - (2) Thirteen (13) screens, identified as P04.
 - (3) Eight (8) bucket elevators, identified as M01.
 - (4) One (1) conveying system, identified as M05, consisting of eleven (11) conveyors.
 - (5) Six (6) blend silos, identified as M03.
 - (6) Three (3) roofing silos, identified as M06.
 - (7) Eight (8) blasting silos, identified as M04.
- (c) One (1) raw slag handling operation, constructed in 1990, with a maximum throughput rate of 75 tons of coal slag per hour, consisting of the following:
 - (1) One (1) loading hopper.
 - (2) Three (3) conveyor transfer points.
 - (3) One (1) initial screening operation.

(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.1.1 General Provisions Relating to NSPS [326 IAC 12-1] [40 CFR 60, Subpart A]

The provisions of 40 CFR 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to dryer P01 except when otherwise specified in 40 CFR 60, Subpart UUU (NSPS for Calciners and Dryers in Mineral Industries).

D.1.2 Particulate Matter Emission Limitation [326 IAC12] [40 CFR 60, Subpart UUU]

Pursuant to 326 IAC 12 and 40 CFR 60.732(a), the PM emissions from dryer P01 shall not exceed 0.025 grain per dry standard cubic foot (gr/dscf).

D.1.3 PM and PM10 Limitations [326 IAC 2-8] [326 IAC 2-2]

Pursuant to 326 IAC 2-8 (FESOP) and in order to make the requirements of 326 IAC 2-2 (PSD) not applicable, the Permittee shall comply with the following requirements:

- (a) The PM/PM10 emissions from dryer P01 shall not exceed 3.5 lbs/hr. This is equivalent to 15.3 tons of PM/PM10 emissions per year.

- (b) The PM/PM10 emissions from the dry slag processing area shall not exceed 3.50 lbs/hr. This limit is equivalent to 15.3 tons of PM/PM10 emissions per year.
- (c) The PM/PM10 emissions from each of the units at the raw slag handling operation shall not exceed the limit listed in the table below:

Unit	PM/PM10 Emission Limit (lbs/hr)
Loading Hopper	1.00
Each of the Three (3) Conveyor Transfer Points	0.50
Screening Operation	2.00

This is equivalent to 19.7 tons/yr of PM/PM10 emissions.

Combined with the PM/PM10 emissions from the portable slag processing plant (#089-05242) and the insignificant activities, the emissions from the entire source are limited to less than 250 tons/yr for PM and less than 100 tons/yr for PM10. Therefore, this source is a minor source under 326 IAC 2-2 (PSD) and the requirements of 326 IAC 2-7 (Part 70 Program) are not applicable.

D.1.4 PM10 Limitations [326 IAC 6.8-2]

Pursuant to 326 IAC 6.8-2 (formerly 326 IAC 6-1-10.1(d)(31)),

- (a) The PM10 emissions from dryer P01 shall not exceed 0.015 grain per dry standard cubic foot (gr/dscf) and 3.5 lbs/hr.
- (b) The PM10 emissions from the dry slag processing area shall not exceed 0.015 gr/dscf and 9.0 lbs/hr.

D.1.5 PM Limitations [326 IAC 6.8-1-2]

Pursuant to 326 IAC 6.8-1-2 (formerly 326 IAC 6-1-2(a)), particulate matter (PM) emissions from the raw slag handling operation shall be limited to 0.03 grain per dry standard cubic foot of exhaust air.

D.1.6 Lake County Particulate Matter Contingency Measures [326 IAC 6.8-11]

Pursuant to 326 IAC 6.8-11 (formerly 326 IAC 6-1-11.2), upon notification from IDEM, OAQ and GDEA that the source has caused or contributed to an exceedance of the twenty-four (24) hour ambient air quality standard for PM10, the Permittee shall implement any reduction measures required by 326 IAC 6.8-11 within one hundred eighty (180) days of the initial notification.

D.1.7 Monitoring Requirements [326 IAC12] [40 CFR 60, Subpart UUU]

Pursuant to 326 IAC 12 and 40 CFR 60.734(d), the Permittee shall install, calibrate, maintain, and operate monitoring devices that continuously measure and record the following parameters for scrubber #14-001 (which is used to control the particulate emissions from dryer P01):

- (a) Pressure drop; and
- (b) Scrubbing liquid flow rate.

D.1.8 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 these facilities and their control devices.

Compliance Determination Requirements

D.1.9 PM and PM10 Control [326 IAC 2-8-5(a)(4)]

- (a) In order to comply with Conditions D.1.2, D.1.3, and D.1.4, scrubber #14-001 controlling the PM and PM10 emissions from the dryer P01, and baghouse #14-002 controlling the

PM and PM10 emissions from the dry slag processing area shall be in operation and control PM/PM10 emissions at all times that these units are in operation.

- (b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (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.

D.1.10 Testing Requirements [326 IAC 2-8-5(a)(1)] [326 IAC 2-1.1-11]

- (a) In order to document compliance with Conditions D.1.2, D.1.3, and D.1.4, within sixty (60) days after achieving the maximum production rate and no later than 180 days after the initial start-up, the Permittee shall conduct PM and PM10 performance tests for the dryer P01 utilizing methods as approved by the Commissioner.
- (b) In order to document compliance with Conditions D.1.3 and D.1.4, within ninety (90) days after issuance of this permit, but no later than 180 days after issuance of permit No.: 089-16215-00107, issued August 9, 2004, the Permittee shall conduct PM and PM10 performance tests for the dry slag processing area utilizing methods as approved by the Commissioner.

These tests shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing. PM10 includes filterable PM10 and condensable PM10.

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

D.1.11 Visible Emissions Notations

- (a) Visible emission notations of the stack exhausts from the scrubber, baghouse and each of the raw slag handling operations (including the hopper, the conveyor transfer points, and the initial screening facility) shall be performed daily 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) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.1.12 Parametric Monitoring [40 CFR 60, Subpart UUU]

- (a) The Permittee shall monitor and record the pressure drop and the flow rate for scrubber #14-001 at the frequency specified in the table below, when the dryer P01 is in operation. Unless operated under conditions for which the Response to Excursions or Exceedances specifies otherwise, the pressure drop across the scrubber and the flow rate shall be maintained within the ranges listed in the table below or determined during the latest compliant stack test:

Scrubber ID	Monitoring Frequency	Pressure Drop Range (inches of water)	Minimum Flow Rate (gallons per minute)
#14-001	Continuous	6.0 – 10.0	225

When for any one reading, the pressure reading is outside the above mentioned range or the flow rate is below the above mentioned minimum, the Permittee shall take reasonable response steps in accordance with Section C-Response to Excursions or Exceedances.

- (b) The Permittee shall record the pressure drop across baghouse #14-002, used in conjunction with the dry slag processing area, at least once per day when these units are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 4.0 - 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 - Response to Excursions or Exceedances. 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 - Response to Excursions or Exceedances shall be considered a deviation from this permit.

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

D.1.13 Scrubber Failure Detection

In the event that a scrubber malfunction 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 response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.1.14 Broken or Failed Bag Detection

- (a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has 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).
- (b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the emission unit. 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).

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

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

D.1.15 Record Keeping Requirements

- (a) To document compliance with Condition D.1.11, the Permittee shall maintain daily records of visible emission notations of the stack exhausts from the scrubber, baghouse and each of the raw slag handling operations.
- (b) To document compliance with Conditions D.1.7, and D.1.12(a), the Permittee shall maintain the following parameters for each scrubber during normal operation:

- (1) The pressure drop; and
 - (2) Flow rate.
- (c) To document compliance with Condition D.1.12(b), the Permittee shall maintain records once per day of the pressure drop during normal operation for the baghouse.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.2

FACILITY CONDITIONS

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

The portable slag processing plant #089-05242, consisting of the following:

- (a) One (1) portable slag processing plant for roofing granule production, constructed in 2004, with a maximum throughput rate of 25 tons of slag per hour, consisting of the following:
 - (1) One (1) feed hopper.
 - (2) Two (2) conveyors to the dryer, identified as M001 and M002.
 - (3) One (1) natural gas-fired rotary dryer, identified as P001, with a maximum heat input capacity of 12 MMBtu/hr, controlled by baghouse CE001, and exhausting through stack S001.
 - (4) One (1) conveyor to chute, identified as M003, controlled by baghouse CE001, and exhausting through stack S001.
 - (5) One (1) chute to the screen, identified as M004, controlled by baghouse CE001, and exhausting through stack S001.
 - (6) One (1) Tayler screen, identified as P002, controlled by baghouse CE001, and exhausting through stack S001.
 - (7) One (1) conveyor to the bucket elevator, identified as M005, controlled by baghouse CE001, and exhausting through stack S001.
 - (8) One (1) QC screen, identified as M006, controlled by baghouse CE001, and exhausting through stack S001.
 - (9) One (1) bucket elevator, identified as P003, controlled by baghouse CE001, and exhausting through stack S001.
 - (10) One (1) diesel fired generator, with a maximum power output of 300 horsepower (HP).
 - (11) Two (2) bucket elevators, identified as P004 and P006, controlled by baghouse CE001, and exhausting through stack S001.
 - (12) One (1) crusher, identified as P005, controlled by baghouse CE001, and exhausting through stack S001.

(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 General Provisions Relating to NSPS [326 IAC 12-1] [40 CFR 60, Subpart A]

The provisions of 40 CFR 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to dryer P001 except when otherwise specified in 40 CFR 60, Subpart UUU (NSPS for Calciners and Dryers in Mineral Industries).

D.2.2 Particulate Matter Emission Limitation [326 IAC12] [40 CFR 60, Subpart UUU]

Pursuant to 326 IAC 12 and 40 CFR 60.732, the PM emissions from dryer P001 shall not exceed the following:

- (a) 0.025 grain per dry standard cubic foot (gr/dscf); and

- (b) 10% opacity.

D.2.3 PM and PM10 Limitations [326 IAC 2-8] [326 IAC 2-2]

Pursuant to 326 IAC 2-8 (FESOP) and in order to make the requirements of 326 IAC 2-2 (PSD) not applicable, the Permittee shall comply with the following requirements:

- (a) The PM/PM10 emissions from the Baghouse CE001, which is used to control the portable dryer P001 and the conveyors, crusher, bucket elevators, and the screening operations, shall not exceed 6.50 lbs/hr. This limit is equivalent to 28.5 tons/yr of PM/PM10 emissions.
- (b) The PM/PM10 emissions from the feed hopper and each of the uncontrolled conveyor transfer points of the portable slag process plant shall not exceed the limit listed in the table below:

Unit	PM/PM10 Emission Limit (lbs/hr)
Feed Hopper	0.22
Each of the Two (2) Uncontrolled Conveyor Transfer Points	0.10

This is equivalent to 1.84 tons/yr of PM/PM10 emissions.

Combined with the PM/PM10 emissions from the stationary slag processing plant (#089-00107), the portable generator, and the insignificant activities, the emissions from the entire source are limited to less than 250 tons/yr for PM and less than 100 tons/yr for PM10. Therefore, this source is a minor source under 326 IAC 2-2 (PSD) and the requirements of 326 IAC 2-7 (Part 70 Program) are not applicable.

D.2.4 PM Limitations [326 IAC 6.8-1-2]

Pursuant to 326 IAC 6.8-1-2 (formerly 326 IAC 6-1-2(a)), particulate matter (PM) emissions from each unit of the portable plant shall be limited to 0.03 grain per dry standard cubic foot of exhaust air.

D.2.5 Lake County Particulate Matter Contingency Measures [326 IAC 6.8-11]

Pursuant to 326 IAC 6.8-11 (formerly 326 IAC 6-1-11.2), upon notification from IDEM, OAQ and GDEA that the source has caused or contributed to an exceedance of the twenty-four (24) hour ambient air quality standard for PM10, the Permittee shall implement any reduction measures required by 326 IAC 6.8-11 within one hundred eighty (180) days of the initial notification.

D.2.6 Monitoring Requirements [326 IAC 12] [40 CFR 60, Subpart UUU]

Pursuant to 326 IAC 12 and 40 CFR 60.734(b), the Permittee shall have a certified visible emissions observer to measure and record three 6-minute averages of the opacity of visible emissions from the baghouse CE001 (used for dryer P001) to the atmosphere each day of operation in accordance with Method 9 of Appendix A of Part 60.

D.2.7 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 these facilities and their control devices.

Compliance Determination Requirements

D.2.8 PM and PM10 Control [326 IAC 2-8-5(a)(4)]

- (a) In order to comply with Conditions D.2.1, D.2.2, and D.2.3, baghouse CE001 shall be in operation and control emissions at all times that the portable dryer or the portable slag handling processes are in operation.
- (b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (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.

D.2.9 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11] [40 CFR 60, Subpart UUU]

In order to document compliance with Conditions D.2.1, D.2.2(a), and D.2.3, within 60 days after achieving the maximum production, but not later than 180 days after initial rerouting of emissions from conveyors and screening operations to baghouse CEE01, the Permittee shall conduct PM performance test utilizing methods as approved by the Commissioner. Testing shall be conducted in accordance with Section C - Performance Testing.

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

D.2.10 Visible Emissions Notations

- (a) Visible emission notations of the stack exhausts from the uncontrolled slag handling operation 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) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.2.11 Parametric Monitoring

The Permittee shall record the pressure drop across baghouse CE001 used in conjunction with the portable dryer and the portable slag handling operations, at least once per day when these units are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range as listed in the table below or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. 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 - Response to Excursions or Exceedances shall be considered a deviation from this permit.

Baghouse ID	Pressure Drop Range (inches of water)
CE001	3.0 – 5.5

CE001

3.0 – 5.5

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

D.2.12 Broken or Failed Bag Detection

- (a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has 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).
- (b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the emission unit. 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).

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

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

D.2.13 Record Keeping Requirements

- (a) To document compliance with Condition D.2.6, the Permittee shall maintain daily records of visible emissions from the stack exhaust from baghouse CE001.
- (b) To document compliance with Condition D.2.10, the Permittee shall maintain once per day records of visible emission notations of the stack exhausts from the baghouse CE001 and from each of the uncontrolled slag handling operations.
- (c) To document compliance with Condition D.2.11, the Permittee shall maintain records once per day of pressure drop during normal operation for the baghouse.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.3 FACILITY CONDITIONS

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

- (a) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.

(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.3.1 PM Limitations [326 IAC 6.8-1-2]

Pursuant to 326 IAC 6.8-1-2 (formerly 326 IAC 6-1-2(a)), particulate matter (PM) emissions from the welding operation shall be limited to 0.03 grain per dry standard cubic foot of exhaust air.

SECTION D.4

FACILITY CONDITIONS

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

- (b) Fuel oil-fired combustion sources with heat input equal to or less than two million (2,000,000) Btu per hour and firing fuel containing less than five-tenths (0.5) percent sulfur by weight.
- (c) Combustion source flame safety purging on startup.
- (d) A petroleum fuel (other than gasoline), dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.
- (e) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.
- (f) Refractory storage not requiring air pollution control equipment.
- (g) Paved and unpaved roads and parking lots with public access.
- (h) Purging of gas lines and vessels that is related to routine maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process.
- (i) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.
- (j) Purge double block and bleed valves.
- (k) Other emission units, not regulated by a NESHAP, with PM₁₀ and SO₂ emissions less than five (5) pounds per hour or twenty-five (25) pounds per day, CO emissions less than twenty-five (25) pounds per day, lead emissions less than six-tenths (0.6) tons per year or three and twenty-nine hundredths (3.29) pounds per day, and emitting greater than one (1) pound per day but less than five (5) pounds per day or one (1) ton per year of a single HAP, or emitting greater than one (1) pound per day but less than twelve and five tenths (12.5) pounds per day or two and five tenths (2.5) ton per year of any combination of HAPs:
 - (1) One (1) coal slag pile, with a maximum capacity of 150,000 tons.
 - (2) One (1) unsaleable pile, with a maximum capacity of 10,000 tons.
 - (3) One (1) fines storage pile.
 - (4) Five (5) slag storage tanks, constructed in 2004.

(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)]

There are no specifically applicable state or federal requirements to these units.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) CERTIFICATION

Source Name: Reed Minerals – Plant 14
Source Address: 7100 West 9th Avenue, Gary, Indiana 46406
Mailing Address: P.O. Box 8888, Camp Hill, PA 17001-8888
FESOP No.: 089-16215-00107

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 46204-2251
Phone: 317-233-5674
Fax: 317-233-5967
and
Gary Department of Environmental Affairs
839 North Broadway
Gary, Indiana 46402
Phone: 219-882-3000
Fax: 219-882-3012**

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

Source Name: Reed Minerals – Plant 14
Source Address: 7100 West 9th Avenue, Gary, Indiana 46406
Mailing Address: P.O. Box 8888, Camp Hill, PA 17001-8888
FESOP No.: 089-16215-00107

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 ₂ , VOC, NO _x , 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**

**and
Gary Department of Environmental Affairs
839 North Broadway
Gary, Indiana 46402
Phone: 219-882-3000
Fax: 219-882-3012**

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

Source Name: Reed Minerals – Plant 14
Source Address: 7100 West 9th Avenue, Gary, Indiana 46406
Mailing Address: P.O. Box 8888, Camp Hill, PA 17001-8888
FESOP No.: 089-16215-00107

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

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

Form Completed By: _____

Title/Position: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

Attachment A

FUGITIVE DUST CONTROL PLAN Reed Minerals- Plant 14 7100 West 9th Avenue

Gary, Indiana

Background

Fugitive dust sources of significance from this site can be categorized into three groups: roadways, fines stockpiles, and inactive ground level areas not dedicated to any particular use.

Total site size is 36.4 acres unpaved with 10,560 yd.² of unpaved roadway (.6mi. x 10 yds.) This plan expects to control fugitive emissions at 92.0% reduction.

Plan of Control

A. Person responsible for plan implementation:

Plant Superintendent
7100 West 9th Avenue
Gary, Indiana
(219) 923-4200

B. Roadway Control Measures

1. All active entrance roadways will be clearly marked and traffic will be restricted to controlled areas.
2. All vehicles shall not exceed 5 mph.
3. All active roadways will be inspected daily to assure nominal thickness (2") of course aggregate oversize is maintained on all traffic areas. Required material will be placed by an on site front loader and/or dump truck.
4. Monthly representative roadway aggregate samples will be taken and analyzed to assure silt content (200 mesh) is less than 3%.

C. Fines stockpile control measures

Note: Raw material stockpiles are exempt from this plan, because silt content is .2% and moisture content is a typical 5%.

1. Storage pile height shall be limited to 50 feet.
2. End loader bucket drop height will be minimized to the lowest practical elevation.
3. Water will be applied to fines stockpiles to control fugitive dust when necessary.
4. Water will not be applied to the fines stockpiles when the following conditions prevail:
 - a. During freezing weather, typically between October 15 and April 15.
5. RMD completed a "green belt" alternatives study for fugitive dust control as follows:
 - a. Summer 1986 (June 1-August 31) Select landscape consultant.
 - b. Fall 1986 (September 1- October 31) Implement vegetative growth test areas.
 - c. Winter 1986 (November 1-February 28) Inspect test areas. Document growth progress. Reseed winter damaged areas.

- d. Spring 1987 (March 1-May 30) Continue documentation of growth areas. Monitor and document progress.
- e. Summer 1987 (June 1-August 31) Review test program. Determine the most viable method of establishing a green belt on site. Prepare for Phase I implementation.
- f. Fall 1987 (September 1 -October 31) Review test areas and evaluate results. Implement Phase I green belt control plan.
- g. Spring 1988 (March 1-April 30) Review and evaluate implementation of green belt project. Prepare to implement Phase II construction of green belt. Repair any winter damage.
- h. Fall 1988 (May 1-October 31) Implement Phase II green belt construction.
- i. Spring 1989 (March 1-May 31) Review control plan and determine whether additional controls are required.

D. Open areas (Inactive)

- 1. All such classified areas will be closed to truck traffic, except by special permit.
- 2. Natural vegetative encroachment will be allowed and promoted. Green belt establishment such as this forbids the use of surface control chemicals which contaminate the existing surface and/or prevent vegetative root penetration
- 3. All open areas with the greatest potential for reactivation as storage for fines will be covered with oversize aggregate, as set forth in the roadway control measures.

E. Plan Implementation

The effective date of this plan was August 1, 1986.

Date of update: January 15, 2003.

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

**Addendum to the
Technical Support Document (TSD)
for a New Source Review and
Federally Enforceable State Operating Permit**

Source Background and Description

Source Name:	Reed Minerals – Plant 14
Source Location:	7100 West 9 th Avenue, Gary, Indiana 46406
County:	Lake
SIC Code:	3295
Operation Permit No.:	F089-16215-00107
Issuance Date:	August 9, 2009
First Significant Permit No.:	SPR089-22517-00107
Permit Reviewer:	ERG/SD

On March 14, 2006 the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) had a notice published in The Post Tribune, Merrillville, Indiana, stating that Reed Minerals – Plant 14 had applied for a Significant Permit Revision to a Federally Enforceable State Operating Permit for a stationary slag processing plant and a portable slag processing plant. The notice also stated that IDEM, 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.

On April 11, 2006, Reed Minerals – Plant 14 submitted comments on the proposed Significant Permit Revision. The summary of the comments and responses are shown below. Deleted text is shown in ~~strikeout~~ and new text is shown in **bold**. The Table of Contents has been updated as necessary.

Comment 1:

The Permittee requested to change Authorized Individual title in Section A.1 from “Director of Operations – Reed Minerals” to “Vice-President of Operations – Reed Minerals”.

Response to Comment 1:

The title of the Authorized Individual in Section A.1 has been changed as shown:

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

The Permittee owns and operates a stationary slag processing plant and a portable slag processing plant.

Authorized individual: **Director of Operations – Reed Minerals
Vice-President of Operations - Reed Minerals**

...

Comment 2:

The Permittee requested Condition D.2.10 – Visible Emission Notations be revised. Before the permit revision (this permit), the daily visible emissions readings in Condition D.2.10 applied to baghouse CE002, whereas baghouse CE001 was covered by Condition D.2.6 – Monitoring Requirements [326 IAC 12][40 CFR 60, Subpart UUU]. Condition D.2.6 requires daily Method 9 readings under the NSPS requirement for the baghouse CE001 used to control emissions from the one (1) natural gas-fired rotary dryer (identified as P001) and is sufficient to demonstrate compliance with the monitoring requirements for the emission units controlled by baghouse CE001.

Response to Comment 2:

Condition D.2.6 requires the Permittee to have a certified visible emissions observer to measure and record three 6-minute averages of the opacity of visible emissions to the atmosphere from dryer P001 controlled by baghouse CE001 each day of operation, in accordance with Method 9 of Appendix A of Part 60. IDEM, OAQ agrees that this condition is sufficient to demonstrate compliance with the monitoring requirements for the emission units controlled by baghouse CE001. However, if a measurement for Condition D.2.6 was not taken on a given day (because the dryer P001 was not in operation), then a notation per Condition D.2.10 would be necessary. Condition D.2.6 has been revised as shown and Condition D.2.10 was amended to clarify that a measurement for Condition D.2.6 satisfies Condition D.2.10. In addition, the baghouse ID and stack ID for item (12) - crusher, listed under the portable slag processing plant, was changed from CE002 and S002 to CE001 and S001, respectively.

SECTION D.2 FACILITY CONDITIONS

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

The portable slag processing plant #089-05242, consisting of the following:

- (a) One (1) portable slag processing plant for roofing granule production, constructed in 2004, with a maximum throughput rate of 25 tons of slag per hour, consisting of the following:
...
 - (12) One (1) crusher, identified as P005, controlled by baghouse ~~CE002~~**CE001**, and exhausting through stack ~~S002~~**S001**.

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

D.2.6 Monitoring Requirements [326 IAC 12] [40 CFR 60, Subpart UUU]

Pursuant to 326 IAC 12 and 40 CFR 60.734(b), the Permittee shall have a certified visible emissions observer to measure and record three 6-minute averages of the opacity of visible emissions from ~~dryer P001 (controlled by baghouse CE0004)~~ **the baghouse CE001 (used for dryer P001)** to the atmosphere each day of operation in accordance with Method 9 of ~~a~~**Appendix A of p**Part 60.

D.2.10 Visible Emissions Notations

- (a) Visible emission notations of the stack exhausts from baghouse ~~CEE01~~**CE001** 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. **A Method 9 measurement taken to comply with Condition D.2.6 shall satisfy the requirement of this condition.**
...

Upon further review, IDEM, OAQ has decided to make the following revisions to the draft permit. The Table of Contents has been updated as necessary.

1. Item (a)(5) under Condition B.19 [Operational Flexibility] was updated as shown.

B.19 Operational Flexibility [326 IAC 2-8-15][326 IAC 2-8-11.1]

- (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:

...

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

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

...

2. The citation for Lake County in Condition C.6 [Fugitive Dust Emissions] was revised from 326 IAC 6-1-11.1 to 326 IAC 6.8-10-3 as shown.

C.6 Fugitive Dust Emissions [326 IAC 6-1-11.1] [326 IAC 6.8-10-3]

Pursuant to 326 **6.8-10-3 (formerly 326 IAC 6-1-11.1)** (Lake County Fugitive Particulate Matter Control Requirements), the particulate matter emissions from source wide activities shall meet the following requirements:

3. Item (b) under Condition D.1.10 [Testing Requirements] was revised as shown.

D.1.10 Testing Requirements [326 IAC 2-8-5(a)(1)] [326 IAC 2-1.1-11]

...

- (b) In order to document compliance with Conditions D.1.3 and D.1.4, within ninety (90) days after issuance of this permit, but no later than 180 days after issuance of permit No.: 089-16215-00107, issued August 9, 2004, the Permittee shall conduct PM and PM10 performance tests for the dry slag processing area utilizing methods as approved by the Commissioner.

...

4. Item (a) under Condition D.1.12 [Parametric Monitoring] was revised as shown.

D.1.12 Parametric Monitoring [40 CFR 60, Subpart UUU]

- (a) The Permittee shall monitor and record the pressure drop and the flow rate for scrubber #14-001 at the frequency specified in the table below, when the dryer P01 is in operation. Unless operated under conditions for which the Response to Excursions or Exceedances specifies otherwise, the pressure drop across the scrubber and the flow rate shall be maintained ~~within~~ the ranges listed in the table below or determined during the latest compliant stack test:

...

5. A period was inserted in the fourth line in between 'unit' and "Operations" under Item (b) under Condition D.1.14 [Broken or Failed Bag Detection].

D.1.14 Broken or Failed Bag Detection

...

- (b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the emission unit. 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).

...

6. Item (c) under Condition D.1.15 [Record Keeping Requirements] was revised to include 'of' in between "once per day" and "the pressure drop."

D.1.15 Record Keeping Requirements

...

- (c) To document compliance with Condition D.1.12(b), the Permittee shall maintain records once per day of the pressure drop during normal operation for the baghouse.
7. The citation in Condition D.2.9 [Testing Requirements] was revised from 326 IAC 2-7-6(1) to 326 IAC 2-8-5(a)(1)]. In addition, the word "test" was changed to "testing" under this condition.

D.2.9 Testing Requirements [326 IAC 2-7-6 2-8-5(a)(1),(6)] [326 IAC 2-1.1-11] [40 CFR 60, Subpart UUU]

In order to document compliance with Conditions D.2.1, D.2.2(a), and D.2.3, within 60 days after achieving the maximum production, but not later than 180 days after initial rerouting of emissions from conveyors and screening operations to baghouse CEE001, the Permittee shall conduct PM performance testing utilizing methods as approved by the Commissioner. Testing shall be conducted in accordance with Section C - Performance Testing.

**Indiana Department of Environmental Management
Office of Air Quality
and Gary Department of Environmental Affairs**

**Technical Support Document (TSD) for a Significant Permit Revision to a
Federally Enforceable State Operating Permit**

Source Background and Description

Source Name:	Reed Minerals – Plant 14
Source Location:	7100 West 9 th Avenue, Gary, Indiana 46406
County:	Lake
SIC Code:	3295
Operation Permit No.:	089-16215-00107
Operation Permit Issuance Date:	August 9, 2004
Permit Revision No.:	089-22517-00107
Permit Reviewer:	ERG/SD

The Office of Air Quality (OAQ) has reviewed a revision application from Reed Minerals – Plant 14 relating to the operation of stationary slag processing plant and a portable slag processing plant.

History

On January 10, 2006, Reed Minerals – Plant 14 submitted an application to IDEM, OAQ requesting an approval for the following modifications:

- (a) Revision of the PM and PM10 emission limitations for the portable slag processing plant's existing rotary dryer (identified as P001) pursuant to 326 IAC 2-8 (FESOP), from 1.00 pound per hour to 6.50 pounds per hour. The Permittee has requested this revision because the former limitation (1.00 pound per hour) is unnecessarily low for maintaining a minor source status under the provisions of 326 IAC 2-8;
- (b) Revision of the PM and PM10 emission limitations for the stationary slag processing plant's one (1) enclosed dry slag processing area pursuant to 326 IAC 2-8 (FESOP), from 9.00 pounds per hour to 3.50 pounds per hour;
- (c) Shutting down an existing baghouse CEE02 used for controlling particulate emissions from conveyors and screening operations under the portable slag processing plant;
- (d) Rerouting emissions from conveyors and screening operations under the portable slag processing plant to existing baghouse CEE01; and
- (e) Construction of one (1) natural gas-fired rotary bed dryer (identified as P01) to replace the existing fluid bed dryer (identified as PO1) used in the stationary slag processing plant. The burner from the fluid bed dryer is not being replaced and will be used in the new rotary bed dryer, therefore there is not an increase in combustion emissions.
- (f) Furthermore, after extensive evaluation and deliberation, IDEM, OAQ has concluded that certain permit conditions that are routinely appealed in FESOPs could be altered in a manner that would be less burdensome on the Permittee but would still ensure that sources can demonstrate compliance with State and Federal Regulations on a continuous basis. Reed Minerals – Plant 14 has agreed that such changes be made to their existing permit. These changes, including the relaxation of compliance monitoring frequency, are being made pursuant to 326 IAC 2-8-11.1(f). Additional changes have been made to the permit as a result of administrative changes and changes to federal and state regulations.

Source Definition

Pursuant to FESOP No.: 089-16215-00107 issued August 9, 2004, this source consists of two (2) plants:

- (a) Reed Minerals – Plant 14 (Plant ID: #089-00107), a stationary slag processing plant, located at 7100 West 9th Avenue, Gary, Indiana 46406 (SIC: 3295), receiving boiler slag from power plants and producing roofing granules and abrasive grit; and
- (b) Reed Minerals Portable Plant (Plant ID: #089-05242), a portable slag processing plant, located at 7100 West 9th Avenue, Gary, Indiana 46406 (SIC: 3295), processing blast furnace slag and producing roofing granules.

Existing Approvals

The source was issued a FESOP (F089-16215-00107) on August 9, 2004. The Permittee has since received the following:

- (a) First Administrative Amendment No.: 089-20294-00107, issued on December 23, 2004; and
- (b) Second Administrative Amendment No.: 089-21212-00107, issued on July 1, 2005.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the Significant Permit Revision 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 application for the purposes of this review was received on January 10, 2006. Additional information was received on February 13, 2006.

Emission Calculations

See Appendix A of this document (SPR) for detailed emission calculations (Appendix A, Page 1 of 2).

Potential To Emit of the Revision

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source 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.”

This table reflects the PTE of the revision after controls.

Pollutant	Potential To Emit (tons/year)
PM	43.7
PM10	43.7
SO ₂	0.0
VOC	0.0
CO	0.0
NO _x	0.0

There are no HAP emissions as a result of this modification.

Justification for Revision

The FESOP is being modified through a FESOP Significant Permit Revision. This revision is being performed pursuant to 326 IAC 2.8-11.1(f)(11)(b) because the modification requires an adjustment to the emissions cap limitations.

Potential to Emit after Revision

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units.

Process/ Emission Unit	Potential to Emit (tons/year)						
	PM	PM-10	SO ₂	VOC	CO	NO _x	HAPs
Natural Gas-Fired Rotary Dryer P01	Less than 15.3	Less than 15.3	0.07	0.65	9.93	11.8	Negligible
Enclosed Dry Slag Processing Area	Less than 39.4 15.3	Less than 38.4 15.3	0.0	0.0	0.0	0.0	0.0
Raw Slag Handling Operation	Less than 19.7	Less than 19.7	0.0	0.0	0.0	0.0	0.0
Portable Natural Gas-Fired Rotary Dryer P001	Less than 4.38	Less than 4.38	0.03	4.42	5.26	Negligible	
Controlled Portable Slag Processing Operations	0.22 28.5	0.22 28.5	0.0	0.0	0.0	0.0	0.0
Uncontrolled Portable Slag Processing Operations	Less than 1.84	Less than 1.84	0.0	0.0	0.0	0.0	0.0
Portable Generator	2.89	2.89	2.69	3.25	8.78	40.7	Negligible
Insignificant Activities	Less than 5.0	Less than 5.0	0.0	Less than 5.0	0.0	0.0	Negligible
Total Emissions	Less than 88.7 88.5	Less than 88.7 88.5	2.79	Less than 9.19	23.1	57.8	Negligible
Title V Thresholds	NA	100	100	100	100	100	10 for a single HAP and 25 for total HAPs

After revising the PM and PM10 emission limitations pursuant to 326 IAC 2-8 (FESOP) for the portable slag processing plant's rotary dryer (P001) and stationary slag processing plant's one (1) enclosed dry slag processing area, the potential to emit of the criteria pollutants from the entire source is still less than the Title V major source thresholds. Therefore, the requirements of 326 IAC 2-7 (Part 70 Permit Program) are not applicable to this source.

County Attainment Status

The source is located in Lake County.

Pollutant	Status
PM10	Attainment
PM2.5	Nonattainment
SO ₂	Primary Nonattainment
NO ₂	Attainment
1-hour Ozone	Nonattainment
8-hour Ozone	Severe Nonattainment
CO	Attainment
Lead	Attainment

- (a) U.S.EPA in Federal Register Notice 70 FR 943 dated January 5, 2005 has designated Lake as nonattainment for PM2.5. On March 7, 2005 the Indiana Attorney General's Office on behalf of IDEM filed a law suit with the Court of Appeals for the District of Columbia Circuit challenging U.S. EPA's designation of non-attainment areas without sufficient data. However, in order to ensure that sources are not potentially liable for violation of the Clean Air Act, the OAQ is following the U.S. EPA's guidance to regulate PM10 emissions as surrogate for PM2.5 emissions pursuant to the Non-attainment New Source Review requirements. See the State Rule Applicability – Entire Source section.
- (b) 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.
- (1) On January 26, 1996 in 40 CFR 52.777(i), the U.S. EPA granted a waiver of the requirements of Section 182(f) of the CAA for Lake and Porter Counties, including the lower NOx threshold for nonattainment new source review. Therefore, VOC emissions alone are considered when evaluating the rule applicability relating to the 1-hour ozone standards. Lake County has been designated as nonattainment in Indiana for the 1-hour ozone standard. Therefore, VOC emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3. See the State Rule Applicability – Entire Source section.
- (2) VOC and NOx emissions are considered when evaluating the rule applicability relating to the 8-hour ozone standard. Lake 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. See the State Rule Applicability – Entire Source section.
- (c) Lake County has been classified as attainment or unclassifiable in Indiana for CO, Pb, NO_x and PM10. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability-Entire Source section.
- (d) Lake County has been classified as nonattainment in Indiana for SO₂. Therefore, these emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3. See the State Rule Applicability – Entire Source section.
- (e) 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.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) included in this revision for this source.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14, 326 IAC 21, 40 CFR Part 63, and 40 CFR 61) included in this revision.

Note: There are no changes to federal rules included in this Significant Permit Revision to a FESOP. The new natural gas-fired rotary dryer (P01) shall be subject to the provisions of 40 CFR 60, Subpart UUU - New Source Performance Standards for Calciners and Dryers in Mineral Industries (326 IAC 12). The new rotary dryer shall be subject to PM and PM10 performance tests as described in Condition D.1.10.

State Rule Applicability - Entire Source

326 IAC 2-3 (Emission Offset)

- (a) This existing source is located in Lake County, which is designated as non-attainment for SO₂ and Ozone under the 1-hour and 8-hour standard. The potential to emit of VOC from this source is less than 25 tons per year and the potential to emit SO₂ is less than 100 tons per year. This revision does not result in increase in potential VOC or SO₂ emissions. Therefore, the provisions of 326 IAC 2-3 (Emission Offset) do not apply.
- (b) Lake County has been designated as non-attainment for PM 2.5 in 70 FR 943 dated January 5, 2005. According to the April 5, 2005 EPA memo titled "Implementation of New Source Review Requirements in PM 2.5 Non-attainment Areas" authored by Steve Page, Director of OAQPS, until EPA promulgates the PM 2.5 major NSR regulations, states should assume that a major stationary source's PM10 emissions represent PM2.5 emissions. IDEM, OAQ will use the PM10 non-attainment major NSR program as a surrogate to address the requirements of non-attainment major NSR for the PM2.5 NAAQS. A major source in a non-attainment area is a source that emits or has the potential to emit 100 tons per year of any regulated pollutant. Reed Minerals – Plant 14 has limited its potential PM and PM10 emissions below 100 tons per year pursuant to the provisions of 326 IAC 2-8, FESOP No.: 089-16215-00107 issued August 9, 2004. Compliance with these provisions also ensures minor source status under 326 IAC 2-3, Emission Offset.
- (c) On January 10, 2006, the Permittee submitted an application requesting an approval to revise the PM and PM10 limits from baghouse CE001 used in conjunction with the portable slag processing unit's existing rotary dryer (identified as P001) from 1.00 pounds per hour to 6.50 pounds per hour, which is equivalent to 28.5 tons per year (see Condition D.2.7(a)). Furthermore, exhaust from conveyors, crushers, bucket elevators, and the screening operations of the portable slag processing plant shall be directed to existing baghouse CE001 and baghouse CEE002 will be shut down.
- (d) On February 11, 2006, the Permittee submitted additional requests as follows: (1) to revise the PM and PM10 limits from the one (1) enclosed dry slag processing area used in conjunction with the stationary slag processing plant from 9.00 pounds per hour to 3.50 pounds per hour, which is equivalent to 15.3 tons per year (See Condition D.1.3(b)); (2) to remove the existing natural gas-fired fluid bed dryer (P01) from the stationary slag processing plant; and (3) to construct one (1) natural gas-fired rotary dryer (P01) at the stationary slag processing plant. The new natural gas-fired rotary dryer will utilize the burner currently in place and will continue to be controlled by an existing wet scrubber (identified as # 14-001).

The potential to emit of PM and PM10 from the entire source after these revisions shall continue to be limited to less than 100 tons per year. Therefore, assuming that PM10 emissions represent PM2.5 emissions, the provisions of 326 IAC 2-3 (Emission Offset) do not apply.

326 IAC 2-2 (PSD)

The source was constructed in 1990 and is not in 1 of 28 source categories. The potential to emit of PM and PM10 is limited to less than 100 tons per year pursuant to the provisions of 326 IAC 2-8, FESOP No.: 089-16215-00107 issued August 9, 2004.

Compliance with the provisions of 326 IAC 2-8 (FESOP) also ensures minor source status under 326 IAC 2-2, PSD. The revisions at the source do not result in an increase in CO or Lead emissions. Therefore, the provisions of 326 IAC 2-2, PSD do not apply to the revision.

326 IAC 2-8 (FESOP)

Pursuant to FESOP No.: 089-16215-00107 issued August 9, 2004, and 326 IAC 2-2 (PSD), the Permittee shall continue to limit their PM and PM10 emissions as follows:

Stationary Slag Processing Plant #089-00107

- (a) The PM and PM10 emissions from the natural gas-fired rotary dryer (identified as P01) shall not exceed 3.5 pounds per hour. This limit is equivalent to 15.3 tons of PM and PM10 per year.
- (b) The PM and PM10 emissions from the one (1) enclosed dry slag processing area shall not exceed 3.50 pounds per hour. This limit is equivalent to 15.3 tons of PM and PM10 per year.
- (c) The PM and PM10 emissions from each of the units at the raw slag handling operation shall not exceed the limit listed in the table below:

Unit	PM and PM10 Emission Limit (pounds per hour)
Loading Hopper	1.00
Each of the Three (3) Conveyor Transfer Points	0.50
Screening Operation	2.00

This limit is equivalent to 19.7 tons of PM and PM10 per year.

Portable Slag Processing Plant #089-05242

- (a) The PM and PM10 emissions from the Baghouse CE001 used in conjunction with the portable dryer (identified as P001), conveyors, crusher, bucket elevators, and the screening operations of the portable slag processing plant shall not exceed 6.50 pounds per hour. This limit is equivalent to 28.5 tons of PM and PM10 per year.
- (b) The PM and PM10 emissions from the feed hopper and each of the uncontrolled conveyor transfer points of the portable slag processing plant shall not exceed the limit listed in the table below:

Unit	PM and PM10 Emission Limit (pounds per hour)
Feed Hopper	0.22
Each of the Two (2) Uncontrolled Conveyor Transfer Points	0.10

This limit is equivalent to 1.84 tons of PM and PM10 per year.

Combined with the PM and PM10 emissions from the portable generator and the insignificant activities, the emissions from the entire source are limited to less than 100 tons per year for PM and PM10. Therefore, this source is a minor source under the provisions of 326 IAC 2-2 (PSD) and 326 IAC 2-3 (Emission Offset) and the provisions of 326 IAC 2-7 (Part 70 Program) do not apply.

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 this permit:

- (a) Opacity shall not exceed an average of twenty percent (20%) 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.

Note: There are no changes to state rules included in this Significant Permit Revision to a FESOP. The Permittee shall continue to comply with the state rules as described in FESOP No.: 089-16215-00107 issued August 9, 2004 and as shown in the SPR (this revision).

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 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 described in FESOP No. 089-16215-00107, issued August 9, 2004 and as revised in the SPR (this revision):

Proposed Changes

1. The Permittee has indicated it plans to reroute emissions from conveyors, bucket elevators and screening operations under the portable slag processing plant #089-05242 to existing baghouse identified as CEE01, while shutting down baghouse identified as CE002. Therefore, references to baghouse CEE02 were deleted throughout the permit. In addition, the Permittee has removed the natural gas-fired fluid bed dryer (P01) and plans to construct a new natural gas-fired rotary dryer (P01).

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

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

Stationary slag processing plant #089-00107, consisting of the following:

- (a) One (1) natural gas-fired fluid-bed rotary dryer, identified as P01 and constructed in 1990 2006, with a maximum heating capacity of 27 MMBtu/hr and a maximum throughput rate of 65 tons of coal slag per hour. This facility is equipped with a wet scrubber (identified as #14-001) for particulate control, which exhausts through stack E001.

Portable slag processing plant #089-05242, consisting of the following:

- (a) One (1) portable slag processing plant for roofing granule production, constructed in 2004, with a maximum throughput rate of 25 tons of slag per hour, consisting of the following:
 - ...
 - (4) One (1) conveyor to chute, identified as M003, controlled by baghouse CE0021, and exhausting through stack S0021.
 - (5) One (1) chute to the screen, identified as M004, controlled by baghouse CE0021 and exhausting through stack S0021.
 - (6) One (1) Tayler screen, identified as P002, controlled by baghouse CE0021, and exhausting through stack S0021.
 - (7) One (1) conveyor to the bucket elevator, identified as M005, controlled by baghouse CE0021, and exhausting through stack S0021.
 - (8) One (1) QC screen, identified as M006, controlled by baghouse CE0021, and exhausting through stack S0021.
 - (9) One (1) bucket elevator, identified as P003, controlled by baghouse CE0021, and exhausting through stack S0021.
 - (10) One (1) diesel fired generator, with a maximum power output of 300 horsepower (HP).
 - (11) Two (2) bucket elevators, identified as P004 and P006, controlled by baghouse CE0021, and exhausting through stack S0021.
 - (12) One (1) crusher, identified as P005, controlled by baghouse CE0021, and exhausting through stack S0021.

SECTION D.1 FACILITY CONDITIONS

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

The stationary slag processing plant #089-00107, consisting of the following:

- (a) One (1) natural gas-fired fluid-bed rotary dryer, identified as P01 and constructed in 1990 2006, with a maximum heating capacity of 27 MMBtu/hr and a maximum throughput rate of 65 tons of coal slag per hour. This facility is equipped with a wet scrubber (identified as #14-001) for particulate control, which exhausts through stack E001.

...

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

SECTION D.2 FACILITY CONDITIONS

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

Portable slag processing plant #089-05242, consisting of the following:

- (a) One (1) portable slag processing plant for roofing granule production, constructed in 2004, with a maximum throughput rate of 25 tons of slag per hour, consisting of the following:

...

- (4) One (1) conveyor to chute, identified as M003, controlled by baghouse CE0021, and exhausting through stack S0021
- (5) One (1) chute to the screen, identified as M004, controlled by baghouse CE0021 and exhausting through stack S0021
- (6) One (1) Tayler screen, identified as P002, controlled by baghouse CE0021, and exhausting through stack S0021.
- (7) One (1) conveyor to the bucket elevator, identified as M005, controlled by baghouse CE0021, and exhausting through stack S0021.
- (8) One (1) QC screen, identified as M006, controlled by baghouse CE0021, and exhausting through stack S0021.
- (9) One (1) bucket elevator, identified as P003, controlled by baghouse CE0021, and exhausting through stack S0021.
- (10) One (1) diesel fired generator, with a maximum power output of 300 horsepower (HP).
- (11) Two (2) bucket elevators, identified as P004 and P006, controlled by baghouse CE0021, and exhausting through stack S0021.
- (12) One (1) crusher, identified as P005, controlled by baghouse CE0021, and exhausting through stack S0021.

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

2. IDEM, OAQ has added a statement to Condition B.11 in order to clarify that the certification form may cover more than one document that is submitted.

B.4011 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]

...

- (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.**

...

3. IDEM, OAQ has determined that the Permittee is not required to keep records of all preventive maintenance. However, where the Permittee seeks to demonstrate that an emergency has occurred, the Permittee must provide, upon request records of preventive maintenance in order to establish that the lack of proper maintenance did not cause or contribute to the deviation. Therefore, IDEM has deleted paragraph (b) of Section B – Preventive Maintenance and has amended the Section B – Emergency Provisions condition as follows:

B.4213 Preventive Maintenance Plan [326 IAC 1-6-3] [326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]

...

~~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~~

~~and~~

~~Gary Department of Environmental Affairs
839 North Broadway
Gary, Indiana 46402~~

~~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.~~
- ~~(e) (b) 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 PMPs does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).~~
- ~~(d) (c) 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.4314 Emergency Provisions [326 IAC 2-8-12]

...

- (e) **The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(9) be revised in response to an emergency.**

...

4. IDEM, OAQ has decided to remove item (d) concerning nonroad engines from B.17-Permit Amendment or Revision condition. 40 CFR 89, Appendix A specifically indicates that states are not precluded from regulating the use and operation of nonroad engines, such as regulations on hour of usage, daily mass emission limits, or sulfur limits on fuel; nor are permits regulating such operations precluded, once the engine is no longer new.

B.4718 Permit Amendment or ~~Modification~~ Revision [326 IAC 2-7-11-2-8-10] [326 IAC 2-7-12 2-8-11.1]

...

- ~~(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.~~

5. IDEM, OAQ has clarified the Section B - Operational Flexibility condition as follows:

B.4819 Operational Flexibility [326 IAC 2-8-15]

...

- (3) The changes do not result in emissions which exceed the emissions allowable ~~under limitations provided in~~ this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

...

- (5) The Permittee maintains records on-site, **on a rolling five (5) year basis**, which document, ~~on a rolling five (5) year basis~~, all such changes and emissions trading trades that are subject to 326 IAC 2-8-15(b) through (d). **The Permittee shall make such records available, upon reasonable request, for 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 **emissions** increases and decreases ~~in emissions in~~ at 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).

...

- (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.**

6. Indiana was required to incorporate credible evidence provisions into state rules consistent with the SIP call published by U.S. EPA in 1997 (62 FR 8314). Indiana has incorporated the credible evidence provision in 326 IAC 1-1-6. This rule became effective March 16, 2005 and is incorporated into this permit as follows.

B.25 Credible Evidence [326 IAC 2-8-4(3)] [326 IAC 2-8-5] [62 FR 8314] [326 IAC 1-16]

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.

7. IDEM, OAQ has determined that in order to avoid duplication of requirements which may be included in D sections, Condition C.7 shall be removed from the permit. The following conditions under Section C were renumbered accordingly.

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

~~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 unit vented to the control equipment is in operation.~~

8. IDEM, OAQ realizes that the specifications of Condition C.13 (formerly C.14) can only be practically applied to analog units, and has therefore clarified the condition to state that the condition only applies to analog units. Upon further review, IDEM, OAQ has also determined that the accuracy of the instruments is not nearly as important as whether the instrument has a range that is appropriate for the normal expected reading of the parameter. Therefore, the accuracy requirements have been removed from the condition.

**C.1413 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11]
[326 IAC 2-8-4(3)] [326 IAC 2-8-5(1)]**

- (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~~ **When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected normal maximum reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ($\pm 2\%$) of full scale reading.**
- (b) ~~Whenever a condition in this permit requires the measurement of a flow rate, the instrument 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 ($\pm 2\%$) of full scale reading.~~
- (cb) The Permittee may request that the IDEM, OAQ and GDEA approve the use of a ~~pressure gauge or other~~ **an** instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative ~~pressure gauge or other~~ instrument specification will adequately ensure compliance with permit conditions requiring the measurement of ~~pressure drop or other~~ **the** parameters.
9. IDEM, OAQ has reconsidered the requirement to develop and follow a Compliance Response Plan. The Permittee will still be required to take reasonable response steps when a compliance monitoring parameter is determined to be out of range or abnormal. Replacing the requirement to develop and follow a Compliance Response Plan with a requirement to take reasonable response steps will ensure that the control equipment is returned to proper operation as soon as practicable, while still allowing the Permittee the flexibility to respond to situations that were not anticipated. The Section D conditions that refer to this condition have been revised to reflect the new condition title, and the following changes have been made to the Section C condition:

C.4716 Compliance Response Plan – Preparation, Implementation, Records, and Reports
Response to Excursions or Exceedances [326 IAC 2-8-4] [326 IAC 2-8-5]

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 activities.~~
- (a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.**
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:**
- (1) initial inspection and evaluation;**
 - (2) recording that operations returned to normal without operator action (such as through response by a computerized distribution control system); or**
 - (3) any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.**
- (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:**
- (1) monitoring results;**
 - (2) review of operation and maintenance procedures and records;**
 - (3) inspection of the control device, associated capture system, and the process.**
- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.**
- (e) The Permittee shall maintain the following records:**
- (1) monitoring data;**
 - (2) monitor performance data, if applicable; and**
 - (3) corrective actions taken.**

10. IDEM, OAQ has determined that it is the Permittee's responsibility to include routine control device inspection requirements in the applicable preventive maintenance plan. Since the Permittee is in the best position to determine the appropriate frequency of control device inspections and the details regarding which components of the control device should be inspected, the conditions requiring control device inspections have been removed from the permit

~~D.1.13 Scrubber Inspections~~

~~An inspection shall be performed each calendar quarter of the scrubber controlling the dryer. Inspections required by this condition shall not be performed in consecutive months.~~

~~D.1.15 Baghouse Inspections~~

~~An inspection shall be performed each calendar quarter of all bags controlling the dry slag processing area. Inspections required by this condition shall not be performed in consecutive months. All defective bags shall be replaced.~~

~~D.2.16 Baghouse Inspections~~

~~An inspection shall be performed each calendar quarter of all bags controlling the portable dryer and the portable slag processing operations. Inspections required by this condition shall not be performed in consecutive months. All defective bags shall be replaced.~~

11. IDEM, OAQ has determined that once per day monitoring of the control device (or of visible emission notations) is generally sufficient to ensure proper operation of the control device. IDEM, OAQ has also determined that monitoring these parameters once per day is sufficient to satisfy the requirements. However, NSPS Subpart UUU requires continuous monitoring of the scrubber.

~~D.1.11 Visible Emissions Notations~~

~~...~~

- ~~(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an If abnormal emissions is are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports Response to Excursions or Exceedances shall be considered a deviation from this permit.~~

~~D.1.12 Parametric Monitoring [40 CFR 60, Subpart UUU]~~

- ~~(a) The Permittee shall monitor and record the pressure drop and the flow rate for scrubber #14-001 at the frequency specified in the table below, when the dryer P01 is in operation. Unless operated under conditions for which the Compliance Response to Excursions or Exceedances Plan specifies otherwise, the pressure drop across the scrubber and the flow rate shall be maintained with the ranges listed in the table below or determined during the latest compliant stack test:~~

Scrubber ID	Monitoring Frequency	Pressure Drop Range (inches of water)	Minimum Flow Rate (gallons per minute)
#14-001	Continuous	6.0 – 10.0	225

~~The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for wWhen for any one reading, the pressure reading is outside the above mentioned range or the flow rate is below the above mentioned minimum, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances.~~

- (b) The Permittee shall record the ~~total-static~~ pressure drop across baghouse #14-002, used in conjunction with the dry slag processing area, at least once per shift **day** when these units are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 4.0 - 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 to~~ **Excursions or Exceedances**. 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 to~~ **Excursions or Exceedances** 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 GDEA and shall be calibrated at least once every six (6) months.

D.2.4410 Visible Emissions Notations

- (a) Visible emission notations of the stack exhausts from baghouse CEE012 shall be performed once per shift **day** during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

...

- (e) ~~The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an~~ **If abnormal emissions is are observed, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances**. Failure to take response steps in accordance with Section C - ~~Compliance Response Plan—Preparation, Implementation, Records and Reports~~ **Response to Excursions or Exceedances** shall be considered a deviation from this permit.

D.2.4511 Parametric Monitoring

The Permittee shall record the ~~total-static~~ pressure drop across baghouses CE001 and CE002, used in conjunction with the portable dryer and the portable slag handling operations, at least once per shift **day** when these units are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range as listed in the table below 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 to~~ **Excursions or Exceedances**. 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 to~~ **Excursions or Exceedances** shall be considered a deviation from this permit.

Baghouse ID	Pressure Drop Range (inches of water)
CE001	3.0 – 5.5
CE002	3.0 – 5.5

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 GDEA, and shall be calibrated at least once every six (6) months.

- 12. Paragraph (a) of the Broken or Failed Bag Detection conditions have been deleted. For multi-compartment baghouses, the permit will not specify what actions the Permittee needs to take in response to a broken bag. However, a requirement has been added to Conditions D.1.9 and D.2.8 (formerly D.2.12) requiring the Permittee to notify IDEM if a broken bag is detected and the

control device will not be repaired for more than ten (10) days. This notification allows IDEM to take any appropriate actions if the emission unit will continue to operate for a long period of time while the control device is not operating in optimum condition. Furthermore, Scrubber Failure Detection condition was revised as shown below:

D.1.9 PM and PM10 Control [326 IAC 2-8-5(a)(4)]

- (a) In order to comply with Conditions D.1.2, D.1.3, and D.1.4, scrubber #14-001 controlling the PM and PM10 emissions from the dryer P01, and baghouse #14-002 controlling the PM and PM10 emissions from the dry slag processing area shall be in operation and control PM/PM10 emissions at all times that these units are in operation.
- (b) **In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (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.**

D.2.428 PM and PM10 Control [326 IAC 2-8-5(a)(4)]

- (a) In order to comply with Conditions D.2.51, D.2.62, and D.2.73, baghouses CE001 and CE002 shall be in operation and control emissions at all times that the portable dryer or the portable slag handling processes are in operation.
- (b) **In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (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.**

Paragraph (b) of the Broken or Failed Bag Detection condition has been revised for those processes that operate in batch mode. The condition required an emission unit to be shut down immediately in case of baghouse failure. However, IDEM is aware there can be safety issues with shutting down a process in the middle of a batch. IDEM also realizes that in some situations, shutting down an emissions unit mid-process can cause equipment damage. Therefore, since it is not always possible to shut down a process with material remaining in the equipment, IDEM has revised the condition to state that in the case of baghouse failure, the feed to the process must be shut off immediately, and the process shall be shut down as soon as practicable.

D.1.4614 Broken or Failed Bag Detection

~~In the event that bag failure has been observed:~~

- ~~(a) For multi-compartment units, the affected baghouse 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 ten (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) (a) For a single compartment baghouses **controlling emissions from a process operated continuously**, 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 a failed units and the associated process **shall** be shut down immediately until the failed units have **has** 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).
- (b) For a single compartment baghouse **controlling emissions from a batch process**, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the emission unit. 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).

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

D.2.4712 Broken or Failed Bag Detection

In the event that bag failure has been observed:

- (a) ~~For multi-compartment units, the affected baghouse 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 ten (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) (a) For a single compartment baghouses **controlling emissions from a process operated continuously**, 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 a failed units and the associated process **shall** be shut down immediately until the failed units have **has** 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).
- (b) For a single compartment baghouse **controlling emissions from a batch process**, the feed to the process shall be shut down immediately until the failed unit has

been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the emission unit. 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).

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

D.1.4413 Scrubber Failure Detection

In the event that a scrubber malfunction 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 response steps in accordance with Section C - ~~Compliance Response Plan - Preparation, Implementation, Records, and Reports to Excursions or Exceedances~~ shall be considered a deviation from this permit.

13. Due to the changes described above, the record keeping requirements were revised as shown.

D.1.4715 Record Keeping Requirements

- (a) To document compliance with Condition D.1.11, the Permittee shall maintain daily records of visible emission notations of the stack exhausts from the scrubber, baghouse and each of the raw slag handling operations.
- (b) To document compliance with Conditions D.1.7, and D.1.12(a), the Permittee shall maintain the following parameters for each scrubber during normal operation:
 - (1) The ~~total static~~ pressure drop; and
 - ...
- (c) To document compliance with Condition D.1.12(b), the Permittee shall maintain **records once per day** of the ~~total static~~ pressure drop during normal business operations for the baghouse.
- (d) ~~To document compliance with Condition D.1.13 and D.1.15, the Permittee shall maintain records of the results of the inspections required under Condition D.1.13 and D.1.15.~~
- (e) ~~To document compliance with Condition D.1.8, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.~~
- (fd) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.2.4813 Record Keeping Requirements

- (a) To document compliance with Condition D.2.406, the Permittee shall maintain daily records of visible emissions from the stack exhaust from baghouse CE001.
- (b) To document compliance with Condition D.2.4410, the Permittee shall maintain once per ~~shift~~ **day** records of visible emission notations of the stack exhausts from the baghouse CE0021 and from each of the uncontrolled slag handling operations.

- (c) To document compliance with Condition D.2.4511, the Permittee shall maintain the total static records once per day of pressure drop during normal operation for the baghouses.
- ~~(d) To document compliance with Condition D.2.16, the Permittee shall maintain records of the results of the inspections required under Condition D.2.16.~~
- ~~(e) To document compliance with Condition D.2.11, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.~~
- (fd) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

14. On January 10, 2006, the Permittee submitted an application requesting an approval to revise the PM and PM10 limits from baghouse CE001 used in conjunction with the portable slag processing unit's rotary dryer (identified as P001) from 1.00 pounds per hour to 6.50 pounds per hour, which is equivalent to 28.5 tons per year (see Condition D.2.7(a)). On February 11, 2006, the Permittee submitted additional requests to revise the PM and PM10 limits from the one (1) enclosed dry slag processing area used in conjunction with the stationary slag processing plant from 9.00 pounds per hour to 3.50 pounds per hour, which is equivalent to 15.3 tons per year (See Condition D.1.3(b)). The potential to emit of PM and PM10 from the entire source after this revision shall continue to be limited to less than 100 tons per year.

D.2.73 PM and PM10 Limitations [326 IAC 2-8] [326 IAC 2-2]

Pursuant to 326 IAC 2-8 (FESOP) and in order to make the requirements of 326 IAC 2-2 (PSD) not applicable, the Permittee shall comply with the following requirements:

- (a) The PM/PM10 emissions from the Baghouse CE001, which is used to control the portable dryer P001 and the conveyors, crusher, bucket elevators, and the screening operations, shall not exceed ~~4.00~~ **6.50** lbs/hr. This limit is equivalent to ~~4.38~~ **28.5** tons/yr of PM/PM10 emissions.
- ~~(b) The PM/PM10 emissions from the Baghouse CE002, which is used to control the conveyors, crusher, bucket elevators, and the screening operations of the portable plant, shall not exceed 0.05 lbs/hr. This limit is equivalent to 0.22 tons/yr of PM/PM10 emissions.~~
- (eb) The PM/PM10 emissions from the feed hopper and each of the uncontrolled conveyor transfer points of the portable slag process plant shall not exceed the limit listed in the table below:

D.1.3 PM and PM10 Limitations [326 IAC 2-8] [326 IAC 2-2]

- ~~(b) The PM/PM10 emissions from the dry slag processing area shall not exceed 9.0~~ **3.50** lbs/hr. This limit is equivalent to ~~39.4~~ **15.3** tons of PM/PM10 emissions per year.

15. All Lake County PM Limitations have been placed in Article 6.8. Therefore, Conditions in Sections D.1 through D.3 were revised as shown below.

D.1.4 PM10 Limitations [326 IAC 6-1-10.1 6.8-2]

Pursuant to 326 IAC 6-1-10.1(d)(31) (Lake County PM10 Emission Requirements) **6.8-2** (formerly 326 IAC 6-1-10.1(d)(31)),

- (a) The PM10 emissions from dryer P01 shall not exceed 0.015 grain per dry standard cubic foot (gr/dscf) and 3.5 lbs/hr.
- (b) The PM10 emissions from the dry slag processing area shall not exceed 0.015 gr/dscf and 9.0 lbs/hr.

D.1.5 PM Limitations [326 IAC 6.8-1-2]

Pursuant to 326 IAC ~~6-1-2(a)(Nonattainment Area Particulate Limitations)~~ **6.8-1-2 (formerly 326 IAC 6-1-2(a))**, particulate matter (PM) emissions from the raw slag handling operation shall be limited to 0.03 grain per dry standard cubic foot of exhaust air.

D.1.6 Lake County Particulate Matter Contingency Measures [326 IAC ~~6-1-11.2~~ 6.8-11]

Pursuant to 326 IAC **6.8-11 (formerly 326 IAC 6-1-11.2)**, upon notification from IDEM, OAQ and GDEA that the source has caused or contributed to an exceedance of the twenty-four (24) hour ambient air quality standard for PM10, the Permittee shall implement any reduction measures required by 326 IAC ~~6-1-11.2~~ **6.8-11** within one hundred eighty (180) days of the initial notification.

D.2.84 PM Limitations [326 IAC 6.8-1-2]

Pursuant to 326 IAC ~~6-1-2(a)(Nonattainment Area Particulate Limitations)~~ **6.8-1-2 (formerly 326 IAC 6-1-2(a))**, particulate matter (PM) emissions from each unit of the portable plant shall be limited to 0.03 grain per dry standard cubic foot of exhaust air.

D.2.95 Lake County Particulate Matter Contingency Measures [326 IAC ~~6-1-11.2~~ 6.8-11]

Pursuant to **326 IAC 6.8-11 (formerly 326 IAC 6-1-11.2)**, upon notification from IDEM, OAQ and GDEA that the source has caused or contributed to an exceedance of the twenty-four (24) hour ambient air quality standard for PM10, the Permittee shall implement any reduction measures required by 326 IAC ~~6-1-11.2~~ **6.8-11** within one hundred eighty (180) days of the initial notification.

D.3.1 PM Limitations [326 IAC ~~6-1-2~~ 6.8-1-2]

Pursuant to 326 IAC ~~6-1-2(a)(Nonattainment Area Particulate Limitations)~~ **6.8-1-2 (formerly 326 IAC 6-1-2(a))**, particulate matter (PM) emissions from the welding operation shall be limited to 0.03 grain per dry standard cubic foot of exhaust air.

16. The Permittee has indicated it plans to remove the existing one (1) natural gas-fired fluid bed dryer (P01) from the stationary slag processing plant and to construct one (1) natural gas-fired rotary dryer (P01) at the stationary slag processing plant. The new natural gas-fired rotary dryer (P01) is subject to the general construction conditions and to the provisions of 40 CFR 60, Subpart UUU – New Source Performance Standards for Calciners and Dryers in Mineral Industries (326 IAC 12) as included in their existing FESOP. According to the provisions of 40 CFR 60.732, Subpart UUU, the Permittee is required to conduct a PM and PM10 performance tests for the rotary dryer P01 as shown in the revised Condition D.1.10. Moreover, Condition D.2.9 (formerly D.2.13) was revised as shown.

D.1.10 Testing Requirements [326 IAC ~~2-7-6(1),(6)~~ 2-8-5(a)(1)] [326 IAC 2-1.1-11]

- (a) In order to document compliance with Conditions D.1.2, D.1.3, and D.1.4, within ninety ~~(90)~~ **sixty (60)** days after issuance of permit ~~(089-16215-00107)~~ **achieving the maximum production rate and no later than 180 days after the initial start-up**, the Permittee shall conduct PM and PM10 performance tests for the dryer P01 utilizing methods as approved by the Commissioner.
- (b) In order to document compliance with Conditions D.1.3 and D.1.4, within ninety (90) days after issuance of this permit, but no later than 180 day after issuance of this permit **No. 089-16215-00107, issued August 9, 2004**, the Permittee shall conduct PM and PM10 performance tests for the dry slag processing area utilizing methods as approved by the Commissioner.

D.2.139 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11] [40 CFR 60, Subpart UUU]

In order to document compliance with Conditions D.2.51, D.2.62(a), and D.2.73, within 60 days after achieving the maximum production, but not later than 180 days after initial startup of this unit **initial rerouting of emissions from conveyors and screening operations to baghouse CEE01**, the Permittee shall conduct PM performance test for the dryer P001 utilizing methods as approved by the Commissioner. Testing shall be conducted in accordance with Section C - Performance Testing.

17. The third sentence in the Quarterly Deviation and Compliance Monitoring report form has been changed as follows to be consistent with Condition B.15 Deviations from Permit Requirements and Conditions:

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. ~~Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report.~~ **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".

18. References to IDEM, QAQ's mailing address have been updated throughout the permit as follows:

Indiana Department of Environmental Management
Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

19. Conditions D.2.1 through D.2.4 were deleted because the Permittee has completed construction of all emissions units listed under Section D.2. All existing D.2 conditions have been renumbered accordingly.

~~THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1 AND 326 IAC 2-8-11.1, WITH CONDITIONS LISTED BELOW.~~

Construction Conditions

General Construction Conditions

D.2.1 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.~~

D.2.2 Federally Enforceable State Operating Permit [326 IAC 2-8]

~~The attached Affidavit of Construction shall be submitted to the Office of Air Quality (OAQ), Permit Administration & Development Section, verifying that the emission units were constructed as proposed in the application.~~

Effective Date of the Permit

D.2.3 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.2.4 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.~~

Operation Conditions

20. IDEM, OAQ has clarified Condition B.3 – Permit Term as follows:

~~B.3 Permit Term [326 IAC 2-8-4(2)][326 IAC 2-1.1-9.5] [IC 13-15-3-6(a)]~~

- ~~(a) 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 of this permit.~~
- ~~(b) If IDEM, OAQ, upon receiving a timely and complete renewal 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, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.~~

21. IDEM, OAQ has included Terms of Conditions pursuant to 326 IAC 2-1.1-9.5 as shown

~~B.4 Term of Conditions [326 IAC 2-1.1-9.5]~~

~~Notwithstanding the permit term of a permit to construct, a permit to operate, or a permit modification, any condition established in a permit issued pursuant to a permitting program approved in the state implementation plan shall remain in effect until:~~

- ~~(a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or~~
- ~~(b) the emission unit to which the condition pertains permanently ceases operation.~~

22. IDEM, OAQ has clarified the Permit Renewal condition as shown

~~B.4617 Permit Renewal [326 IAC 2-8-3(h)]~~

~~...~~

~~(b) Timely Submittal of Permit Renewal [326 IAC 2-8-3]~~

~~(4b) A timely renewal application is one that is:~~

- ~~(A1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and~~
- ~~(B2) 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 being needed to process the application.

Conclusion

The operation of this stationary slag processing plant and portable slag processing plant shall be subject to the conditions of this Significant Permit Revision No.: 089-22517-00107.

**Appendix A: Emission Calculations
PM and PM10 Emissions**

Company Name: Reed Minerals - Plant 14
Address: 7100 West 9th Avenue, Gary, Indiana 46406
SPR to FESOP: 089-22517
Pit ID: 089-00107
Reviewer: ERG/SD
Date: February 3, 2006

Process	Emission Unit	Control	326 IAC 2-8 (FESOP) PM and PM10 Limit (lb/hour)	326 IAC 2-8 (FESOP) PM and PM10 Limit (tons/year)
Portable Slag Processing Plant	Portable Rotary Dryer P001 Conveyors, Crusher Bucket Elevator, Screening Operations	Baghouse CEE01	6.50	28.5
Stationary Slag Processing Plant	Enclosed Dry Slag Processing Area	Baghouse # 14-002	3.50	15.3
Stationary Slag Processing Plant	Stationary Rotary Dryer P01	Wet Scrubber #14-001	3.50	15.3

METHODOLOGY

Limited PTE of PM/PM10 (tons/year) = Emission Limit (lb/hour) * 8760 hours/year * 1 ton/2000 lbs

**Appendix A: Emission Calculations
Natural Gas-Fired Rotary Dryer (P01)**

Company Name: Reed Minerals - Plant 14
Address: 7100 West 9th Avenue, Gary, Indiana 46406
SPR to FESOP: 089-22517
Pit ID: 089-00107
Reviewer: ERG/SD
Date: February 3, 2006

Heat Input Capacity
(MMBtu/hour)

27.0

Potential Throughput
(MMSCF/year)

232

Wet Scrubber
Control Efficiency

99.5% (for PM/PM10 only)

Emission Factor	Pollutant					
	PM* 2.09 (lbs/hr)	PM10* 2.09 (lbs/hr)	**SO ₂ 0.6 (lbs/MMCF)	**NO _x 100 (lbs/MMCF)	**VOC 5.5 (lbs/MMCF)	**CO 84.0 (lbs/MMCF)
PTE (tons/year) After Control	9.15	9.15	0.07	11.6	0.64	9.74
PTE (tons/year) Before Control	1,831	1,831	0.07	11.6	0.64	9.74

* PM/PM10 emission rates are from the PM stack testing results on 09/08/94. Assume all PM10 emissions are equal to PM emissions.

**Emission factors are from AP-42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3 (AP-42 Supplement D, 3/98).

NOTE: The NG combustion calculations are from the original FESOP issued to the source.

METHODOLOGY

Potential Throughput (MMSCF/year) = Heat Input Capacity (MMBtu/hour) * 8760 hours/year * 1 MMSCF/1,020 MMBtu

PTE of SO₂, NO_x, VOC and CO (tons/yr) = Potential Throughput (MMSCF/year) * Emission Factor (lb/MMSCF) x 1 ton/2000 lbs

PTE of PM/PM10 Before Control (tons/year) = Emission Rate (lbs/hour) * 8760 hours/year x 1 ton/2000 lbs

PTE of PM/PM10 After Control (tons/year) = Emission Rate (lbs/hour) * 8760 hours/year * 1 / (1 - Control Efficiency %)