**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**
*We Protect Hoosiers and Our Environment.*

*Mitchell E. Daniels Jr.*
**Governor**

*Thomas W. Easterly*
**Commissioner**

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

TO: Interested Parties / Applicant

DATE: December 10, 2009

RE: USS -J. L. Smith Services-contractor of US Steel / 089-28415-00509

FROM: Matthew Stuckey, Branch 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, Suite N 501E, 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.dot12/03/07

IDEM

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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**www.idem.IN.gov**

Mr. Joseph L. Smith
J. L. Smith Services DBA American Crushing & Recycling
3160 Kill Road
Delphos, OH 45833

December 10,2009

Re: 089-28415-00509
Significant Source Modification to:
Part 70 Permit No.: T089-23525-00509

Dear Mr. Smith:

J. L. Smith Services DBA American Crushing & Recycling was issued a Part 70 Operating Permit T 089-23525-00509 on December 15, 2006 for a stationary crushing and screening plant. A letter requesting changes to this permit was received on August 7, 2009. Pursuant to the provisions of 326 IAC 2-7-12 a significant permit modification to this permit is hereby approved as described in the attached Technical Support Document.

J.L. Smith Services DBA American Crushing & Recycling is proposing to install the following emission units:

(a) One (1) screening operation, approved for construction in 2009, with a maximum capacity of 125 tons of steel slag per hour, consisting of the following:

(1) One (1) feed hopper, identified as FH-1, receiving material via stacker conveyor SC-1 or truck, equipped with a metering wheel to discharge material. Note: There are no transfer points associated with FH-1.

(2) One (1) conveyor, identified as T-1, transferring material from feed hopper FH-1 to screener SC-1, consisting of one (1) transfer point.

(3) One (1) screener, identified as SR-1, with a maximum of three (3) screen decks.

(4) Four (4) conveyors, identified as T2, T3, T4, and T5, approved for construction in 2009, each used in conjunction with screener SR-1, and each consisting of one (1) transfer point.

(b) One (1) stacker conveyor, identified as SC-1, approved for construction in 2009, with a conveying capacity of 125 tons of steel slag per hour, utilized for transporting slag from the crusher (CR-1) to the feed hopper (FH-1).

(c) One (1) stacker conveyor, identified as SC-2, approved for construction in 2009, with a conveying capacity of 125 tons of steel slag per hour, consisting of one (1) transfer point, utilized for transporting material from the screener SR-1 to a stockpile.

(d) One (1) diesel fired engine, identified as G-1, approved for installation in 2009, used to power crusher CR-1, with a maximum rated output of 300 hp-hr.

(e) One (1) diesel fired engine, identified as G-3, approved for installation in 2009, used to power stacker conveyor SC-2, with a maximum rated output of 85 hp-hr.

All other conditions of the permit shall remain unchanged and in effect. Please find attached the entire Part 70 Operating Permit as modified.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Jenny Acker, OAQ, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana, 46204-2251, or call at (800) 451-6027, and ask for Jenny Acker or extension 3-9327, or dial (317) 233-9327.

Sincerely,

Chrystal A. Wagner, Section Chief
Permits Branch
Office of Air Quality

Attachments:
SPM No.: 089-28415-00509
Technical Support Document (TSD)

JLA

cc: File - Lake County
Lake County Health Department
Northwest Regional Office

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
*We make Indiana a cleaner, healthier place to live.*

*Mitchell E. Daniels, Jr.*
Governor

*Thomas W. Easterly*
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204-2251
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

# Significant Permit Modification to a Part 70 Operating Permit OFFICE OF AIR QUALITY

## J.L. Smith Services DBA American Crushing & Recycling, an on-site contractor for U.S. Steel - Gary Works
## One North Broadway
## Gary, Indiana 46402

(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 provisions of this permit is grounds for enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. Noncompliance with any provision of this permit, except any provision specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act. 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 2-7 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.

| Part 70 Operating Permit No.: T089-23525-00509 | |
|---|---|
| Issued by: Original Signed By:<br>*Nisha Sizemore*<br>Nisha Sizemore, Chief<br>Permits Branch<br>Office of Air Quality | Issuance Date: December 15, 2006<br><br>Expiration Date: December 15, 2011 |

| Significant Permit Modification No.: T089-28415-00509 | |
|---|---|
| Issued by:<br><br>Chrystal A. Wagner, Section Chief<br>Permits Branch<br>Office of Air Quality | Issuance Date: December 10,2009<br><br>Expiration Date: December 15, 2011 |

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Attachment A - Fugitive Dust Control Plan

Attachment B - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, [40 CFR 60, Subpart IIII]

## SECTION A SOURCE SUMMARY

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

### A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary crushing and screening plant.

| | |
|---|---|
| Source Address: | One North Broadway, Gary, Indiana 46402 |
| Mailing Address: | 2484 Lindair Drive, Springfield, Ohio 45502 |
| General Source Phone Number: | (937) 360-5807 |
| SIC Code: | 1429 |
| County Location: | Lake |
| Source Location Status: | Nonattainment for ozone under 8-hour standard<br>Attainment for all other criteria pollutants |
| Source Status: | Part 70 Permit Program<br>Major Source, under PSD and Nonattainment New Source Review<br>Major Source, Section 112 of the Clean Air Act<br>1 of 28 Source Categories |

### A.2 Part 70 Source Definition [326 IAC 2-7-1(22)]

This steel mill consists of a source with on-site contractors:

(a) U.S. Steel Gary Works, the primary operation, is located at One North Broadway, Gary Indiana, and

(b) J.L. Smith Services DBA American Crushing & Recycling, the supporting operation, is located at One North Broadway, Gary, Indiana.

IDEM has determined that U.S. Steel Gary Works and J.L. Smith Services DBA American Crushing & Recycling are under the common control of U.S. Steel Gary Works, and therefore, will be considered as one source, as defined by 326 IAC 2-7-1(22), based on this contractual control.

### A.3 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

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

(a) One (1) screening operation, approved for installation in 2009, with a maximum capacity of 125 tons of steel slag per hour, consisting of the following:

(1) One (1) feed hopper, identified as FH-1, receiving material via stacker conveyor SC-1 or truck, equipped with a metering wheel to discharge material. Note: There are no transfer points associated with FH-1.

(2) One (1) conveyor, identified as T-1, transferring material from feed hopper FH-1 to screener SC-1, consisting of one (1) transfer point.

(3) One (1) screener, identified as SR-1, with a maximum of three (3) screen decks.

(4) Four (4) conveyors, identified as T2, T3, T4, and T5, approved for construction in 2009, each used in conjunction with screener SR-1, and each consisting of one (1) transfer point.

(b) One (1) crusher, identified as CR-1, installed in 2006, with a maximum throughput capacity of 125 tons of steel mill slag per hour, receiving overburden material from screener SR-1 via conveyor T-2.

(c) One (1) stacker conveyor, identified as SC-1, approved for installation in 2009, with a conveying capacity of 125 tons of steel slag per hour, utilized for transporting slag from the crusher (CR-1) to the feed hopper (FH-1).

(d) One (1) stacker conveyor, identified as SC-2, approved for installation in 2009, with a conveying capacity of 125 tons of steel slag per hour, consisting of one (1) transfer point, utilized for transporting material from the screener SR-1 to a stockpile.

(e) One (1) diesel fired engine, identified as G-1, approved for installation in 2009, used to power crusher CR-1, with a maximum rated output of 300 hp-hr.

(f) One (1) diesel fired engine, identified as G-2, approved for installation in 2006, used to power screener SR-1, with a maximum rated output of 125 hp-hr.

(g) One (1) diesel fired engine, identified as G-3, approved for installation in 2009, used to power stacker conveyor SC-2, with a maximum rated output of 85 hp-hr.

(h) Material handling and storage piles.

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

(a) It is a major source, as defined in 326 IAC 2-7-1(22);

(b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

## SECTION B GENERAL CONDITIONS

### B.1 Definitions [326 IAC 2-7-1]

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.2 Permit Term [326 IAC 2-7-5(2)][326 IAC 2-1.1-9.5][326 IAC 2-7-4(a)(1)(D)][IC 13-15-3-6(a)]

(a) This permit, T089-28324-00509, 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.3 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.4 Enforceability [326 IAC 2-7-7] [IC 13-17-12]

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

### B.5 Severability [326 IAC 2-7-5(5)]

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.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

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

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

(a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.

(b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

### B.8 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]

(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 the "responsible official" 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) A "responsible official" is defined at 326 IAC 2-7-1(34).

B.9 Annual Compliance Certification [326 IAC 2-7-6(5)]

(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 no later than April 15 of each year to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

(b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(c) The annual compliance certification report shall include the following:

(1) The appropriate identification of each term or condition of this permit that is the basis of the certification;

(2) The compliance status;

(3) Whether compliance was continuous or intermittent;

(4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and

(5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

B.10 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)][326 IAC 2-7-6(1) and (6)][326 IAC 1-6-3]

(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 or ninety (90) days after initial start-up, whichever is later, including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

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

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The PMP extension notification does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(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 do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(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.11 Emergency Provisions [326 IAC 2-7-16]

(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.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, and Northwest Regional Office within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance and Enforcement Branch), or
Telephone Number: 317-233-0178 (ask for Compliance and Enforcement Branch)
Facsimile Number: 317-233-6865
Northwest Regional Office phone: (219) 757-0265; fax: (219) 757-0267**.**

(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 and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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 2-7-5(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 "responsible official" as defined by 326 IAC 2-7-1(34).

(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 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 2-7 and any other applicable rules.

(g) 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.

(h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report. Any emergencies that have been previously reported pursuant to paragraph (b)(5) of this condition and certified by the "responsible official" need only referenced by the date of the original report.

B.12 Permit Shield [326 IAC 2-7-15][326 IAC 2-7-20][326 IAC 2-7-12]

(a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced 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 Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.

(b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.

(c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.

(d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:

(1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;

(2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;

(3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and

(4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.

(e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).

(f) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]

(g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(8)]

B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5][326 IAC 2-7-10.5]

(a) All terms and conditions of permits established prior to T089-23525-00509 and issued pursuant to permitting programs approved into the state implementation plan have been either:

(1) incorporated as originally stated,

(2) revised under 326 IAC 2-7-10.5, or

(3) deleted under 326 IAC 2-7-10.5.

(b) Provided that all terms and conditions are accurately reflected in this combined permit, all previous registrations and permits are superseded by this combined new source review and part 70 operating permit.

B.14 Termination of Right to Operate [326 IAC 2-7-10][326 IAC 2-7-4(a)]

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 2-7-3 and 326 IAC 2-7-4(a).

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

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

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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 not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(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 2-7-5(6)(C)][326 IAC 2-7-8(a)][326 IAC 2-7-9]

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 Operating Permit 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 2-7-5(6)(C)] The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:

(1) That this permit contains a material mistake.

(2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.

(3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]

(c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]

(d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.17 Permit Renewal [326 IAC 2-7-3][326 IAC 2-7-4][326 IAC 2-7-8(e)]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-7-4. 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 "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(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 on or before the date it is due.

(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 2-7 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.

B.18 Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12]

(a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 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
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.19 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)][326 IAC 2-7-12(b)(2)]

(a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.

(b) Notwithstanding 326 IAC 2-7-12(b)(1) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

B.20 Operational Flexibility [326 IAC 2-7-20][326 IAC 2-7-10.5]

(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b),(c), or (e) without a 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 preconstruction approval required by 326 IAC 2-7-10.5 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
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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 emission trades that are subject to 326 IAC 2-7-20(b),(c), or (e). 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 2-7-20(b)(1), (c)(1), and (e)(2).

(b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

(1) A brief description of the change within the source;

(2) The date on which the change will occur;

(3) Any change in emissions; and

(4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

(c) Emission Trades [326 IAC 2-7-20(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 2-7-20(c).

(d) Alternative Operating Scenarios [326 IAC 2-7-20(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 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.

(e) 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.21 Source Modification Requirement [326 IAC 2-7-10.5]

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

B.22 Inspection and Entry [326 IAC 2-7-6][IC 13-14-2-2][IC 13-30-3-1][IC 13-17-3-2]

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

(a) Enter upon the Permittee's premises where a Part 70 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 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 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 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.23 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

(a) The Permittee must comply with the requirements of 326 IAC 2-7-11 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
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The application which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.

(b) Except as provided in 326 IAC 2-7-19(e), 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.25 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314] [326 IAC 1-1-6]

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

**Emission Limitations and Standards [326 IAC 2-7-5(1)]**

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

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

C.4 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). 326 IAC 6-4-2(4) is not federally enforceable.

C.5 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 $PM_{10}$ 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) The $PM_{10}$ emissions from each material processing stack shall not exceed twenty-two thousandths (0.022) grains per dry standard cubic foot and ten percent (10%) opacity.

(l) Fugitive particulate matter from the material processing facilities shall not exceed ten percent (10%) opacity.

(m) Slag and kish handling activities at integrated iron and steel plants shall comply with the following particulate emissions limits:

(1) The opacity of fugitive particulate emissions from transfer from pots and trucks into pits shall not exceed twenty percent (20%) on a six (6) minute average.

(2) The opacity of fugitive particulate emissions from transfer from pits into front end loaders and from transfer from front end loaders into trucks shall comply with the fugitive particulate emission limits in 326 IAC 6.8-10-3(9).

(n) Any facility or operation not specified in 326 IAC 6.8-10-3 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 attached Fugitive Dust Control Plan.

C.6 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
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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 "responsible official" as defined by 326 IAC 2-7-1(34).

(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 Licensed 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 Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Licensed Asbestos inspector is not federally enforceable.

**Testing Requirements [326 IAC 2-7-6(1)]**

C.7 Performance Testing [326 IAC 3-6]

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

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

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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 "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

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

C.8 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 2-7-5(1)][326 IAC 2-7-6(1)]**

C.9 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(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 or ninety (90) days of initial start-up, whichever is later. 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 and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a source modification shall be implemented when operation begins.

C.10 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.

**Corrective Actions and Response Steps [326 IAC 2-7-5][326 IAC 2-7-6]**

C.11 Risk Management Plan [326 IAC 2-7-5(12)] [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.12 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]

(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; and/or

(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.13 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5][326 IAC 2-7-6]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

**Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

C.14 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

(a) In accordance with the compliance schedule specified in 326 IAC 2-6-3(b)(1), starting in 2007 and every three (3) years thereafter, the Permittee shall submit by July 1 an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:

(1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);

(2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1 (32) ("Regulated pollutant, which is used only for purposes of Section 19 of this rule") from the source, for purpose of fee assessment.

The statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue
MC 61-50 IGCN 1003
Indianapolis, Indiana 46204-2251

The emission statement does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

C.15 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-2][326 IAC 2-3]

(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 or ninety (90) days of initial start-up, whichever is later.

(c) If there is a reasonable possibility (as defined in 40 CFR 51.165(a)(6)(vi)(A), 40 CFR 51.165(a)(6)(vi)(B), 40 CFR 51.166(r)(6)(vi)(a), and/or 40 CFR 51.166(r)(6)(vi)(b)) that a "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(ll)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(rr) and/or 326 IAC 2-3-1(mm)), the Permittee shall comply with following:

(1) Before beginning actual construction of the “project” (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(ll)) at an existing emissions unit, document and maintain the following records:

(A) A description of the project.

(B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.

(C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:

(i) Baseline actual emissions;

(ii) Projected actual emissions;

(iii) Amount of emissions excluded under section 326 IAC 2-2-1(rr)(2)(A)(iii) and/or 326 IAC 2-3-1 (mm)(2)(A)(iii); and

(iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.

(d) If there is a reasonable possibility (as defined in 40 CFR 51.165(a)(6)(vi)(A) and/or 40 CFR 51.166(r)(6)(vi)(a)) that a “project” (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(ll)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a “major modification” (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) may result in significant emissions increase and the Permittee elects to utilize the “projected actual emissions” (as defined in 326 IAC 2-2-1(rr) and/or 326 IAC 2-3-1(mm)), the Permittee shall comply with following:

(1) Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any existing emissions unit identified in (1)(B) above; and

(2) Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity of or the potential to emit that regulated NSR pollutant at the emissions unit.

C.16 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [326 IAC 2-2][326 IAC 2-3]

(a) The Permittee 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 "responsible official" as defined by 326 IAC 2-7-1(34).

(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 and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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

(d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(e) The first report shall cover the period commencing on the date of issuance of this permit or the date of initial start-up, whichever is later, and ending on the last day of the reporting period. Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit, “calendar year” means the twelve (12) month period from January 1 to December 31 inclusive.

(f) If the Permittee is required to comply with the recordkeeping provisions of (d) in Section C - General Record Keeping Requirements for any “project” (as defined in 326 IAC 2-2-1 (qq) and/or 326 IAC 2-3-1 (ll)) at an existing emissions unit, and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ:

(1) The annual emissions, in tons per year, from the project identified in (c)(1) in Section C- General Record Keeping Requirements exceed the baseline actual emissions, as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(i), by a significant amount, as defined in 326 IAC 2-2-1 (xx) and/or 326 IAC 2-3-1 (qq), for that regulated NSR pollutant, and

(2) The emissions differ from the preconstruction projection as documented and maintained under Section C - General Record Keeping Requirements (c)(1)(C)(ii).

(g) The report for project at an existing emissions unit shall be submitted within sixty (60) days after the end of the year and contain the following:

(1) The name, address, and telephone number of the major stationary source.

(2) The annual emissions calculated in accordance with (d)(1) and (2) in Section C - General Record Keeping Requirements.

(3) The emissions calculated under the actual-to-projected actual test stated in 326 IAC 2-2-2(d)(3) and/or 326 IAC 2-3-2(c)(3).

(4) Any other information that the Permittee deems fit to include in this report.

Reports required in this part shall be submitted to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(h) The Permittee shall make the information required to be documented and maintained in accordance with (c) in Section C- General Record Keeping Requirements available for review upon a request for inspection by IDEM, OAQ. The general public may request this information from the IDEM, OAQ under 326 IAC 17.1.

**Stratospheric Ozone Protection**

C.17 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 OPERATION CONDITIONS

**Facility Description [326 IAC 2-7-5(15)]:**

(a) One (1) screening operation, approved for installation in 2009, with a maximum capacity of 125 tons of steel slag per hour, consisting of the following:

(1) One (1) feed hopper, identified as FH-1, receiving material via stacker conveyor SC-1 or truck, equipped with a metering wheel to discharge material. Note: There are no transfer points associated with FH-1.

(2) One (1) conveyor, identified as T-1, transferring material from feed hopper FH-1 to screener SC-1, consisting of one (1) transfer point.

(3) One (1) screener, identified as SR-1, with a maximum of three (3) screen decks.

(4) Four (4) conveyors, identified as T2, T3, T4, and T5, approved for construction in 2009, each used in conjunction with screener SR-1, and each consisting of one (1) transfer point.

(b) One (1) crusher, identified as CR-1, installed in 2006, with a maximum throughput capacity of 125 tons of steel mill slag per hour, receiving overburden material from screener SR-1 via conveyor T-2.

(c) One (1) stacker conveyor, identified as SC-1, approved for installation in 2009, with a conveying capacity of 125 tons of steel slag per hour, utilized for transporting slag from the crusher (CR-1) to the feed hopper (FH-1).

(d) One (1) stacker conveyor, identified as SC-2, approved for installation in 2009, with a conveying capacity of 125 tons of steel slag per hour, consisting of one (1) transfer point, utilized for transporting material from the screener SR-1 to a stockpile.

(e) One (1) diesel fired engine, identified as G-1, approved for installation in 2009, used to power crusher CR-1, with a maximum rated output of 300 hp-hr.

(f) One (1) diesel fired engine, identified as G-2, approved for installation in 2006, used to power screener SR-1, with a maximum rated output of 125 hp-hr.

(g) One (1) diesel fired engine, identified as G-3, approved for installation in 2009, used to power stacker conveyor SC-2, with a maximum rated output of 85 hp-hr.

(h) Material handling and storage piles.

(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 2-7-5(1)]**

D.1.1 Prevention of Significant Deterioration (PSD) and Nonattainment NSR Minor Limits [326 IAC 2-2] [326 IAC 2-1.1-5]

Pursuant to 326 IAC 2-2 (PSD) and 326 IAC 2-1.1-5 (Nonattainment NSR), the following conditions shall apply:

(a) The total amount of slag processed shall not exceed four hundred thirty thousand (430,000) tons of material per twelve (12) consecutive month period with compliance determined at the end of each month.

(b) The moisture content of the slag processed shall not be less than two percent (2.0%).

(c) The amount of sand processed through the final screen deck (fines screening) of SR-1 shall not exceed one hundred twenty-nine (129,000) tons per twelve (12) consecutive month period with compliance determined at the end of each month.

(d) The total amount of diesel fuel consumed by the three (3) generators (G-1, G-2, and G-3) shall be less than one hundred thirty thousand (130,000) gallons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with these limitations will ensure that the potential to emit from this source is less than twenty-five (25) tons of PM per year, less than fifteen (15) tons of $PM_{10}$ per year, less than ten (10) tons of $PM_{2.5}$ per year, and less than forty (40) tons of $NO_x$ per year. Therefore, the requirements of 326 IAC 2-2 (PSD) and 326 IAC 2-1.1-5 (Nonattainment NSR) are rendered not applicable.

D.1.2 Particulate Matter (PM) [326 IAC 6.8-1-2]

(a) Pursuant to 326 IAC 6.8-1-2(a)(Particulate Emission Limitations for Lake County), particulate matter (PM) emissions from the crushing and screening operations shall be limited to 0.03 grains per dry standard cubic foot of exhaust air.

(b) Pursuant to 326 IAC 6.8-1-2(a) (Particulate Emission Limitations for Lake County), particulate matter (PM) emissions from the one (1) diesel engine shall be limited to 0.03 grain per dry standard cubic foot of exhaust air.

D.1.3 Fugitive Dust Emission Limitations [326 IAC 6-4-2][326 IAC 6.8-10-3]

(a) Pursuant to 326 IAC 6-4-2:

(1) The screening, and conveying, generating fugitive dust shall be in violation of this rule (326 IAC 6-4) if any of the following criteria are violated:

(A) A source or combination of sources which cause to exist fugitive dust concentrations greater than sixty-seven percent (67%) in excess of ambient upwind concentrations as determined by the following formula:

$$\frac{P = 100\ (R) - U)}{U}$$

Where
P = Percentage increase
R = Number of particles of fugitive dust measured at downward receptor site
U = Number of particles of fugitive dust measured at upwind or background site

(B) The fugitive dust is comprised of fifty percent (50%) or more respirable dust, then the percent increase of dust concentration in subdivision (1) of this section shall be modified as follows:

$$PR = (1.5 \pm N)\ P$$

Where
N = Fraction of fugitive dust that is respirable dust;
PR = allowable percentage increase in dust concentration above background; and
P = no value greater than sixty-seven percent (67%).

(C) The ground level ambient air concentrations exceed fifty (50) micrograms per cubic meter above background concentrations for a sixty (60) minute

period.

(D) If fugitive dust is visible crossing the boundary or property line of a source. This subdivision may be refuted by factual data expressed in subdivisions (1), (2) or (3) of this section. 326 IAC 6-4-2(4) is not federally enforceable.

(2) Pursuant to 326 IAC 6-4-6(6) (Exceptions), fugitive dust from a source caused by adverse meteorological conditions will be considered an exception to this rule (326 IAC 6-4) and therefore not in violation.

(b) Pursuant to 326 IAC 6.8-10-3 (Lake County Fugitive Particulate Matter Emissions Limitations), fugitive emissions from the screening, and conveying, generating fugitive dust shall comply with the emissions limitations in Section C - Fugitive Dust Emissions.

D.1.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities.

**Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

D.1.5 Visible Emissions Notations

(a) Visible emission notations of the crushing, screening, and conveying 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 with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

**Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-19]**

D.1.6 Record Keeping Requirements

(a) To document compliance with Condition D.1.1(a), the Permittee shall maintain records of the amount of material processed. Records shall be complete and sufficient to demonstrate compliance with Condition D.1.1(a).

(b) To document compliance with Condition D.1.1(b), the Permittee shall maintain records of the amount of diesel fuel consumed by the three (3) generators (G-1, G-2, and G-3). Records shall be complete and sufficient to demonstrate compliance with Condition D.1.1(b).

(c) To document compliance with Condition D.1.5, the Permittee shall maintain records of once per day visible emission notations for the crushing, screening, and conveying operations. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the

process did not operate that day).

(d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.7 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.1.1(a) and (b) shall be submitted to the address listed in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or the equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

## SECTION E.1 FACILITY OPERATION CONDITIONS

**Facility Description [326 IAC 2-7-5(15)]:**

(e) One (1) diesel fired engine, identified as G-1, installed in 2006, used to power crusher CR-1, with a maximum rated output of 300 hp-hr.

(f) One (1) diesel fired engine, identified as G-2, approved for installation in 2009, used to screener SR-1, with a maximum rated output of 125 hp-hr.

(g) One (1) diesel fired engine, identified as G-3, approved for installation in 2009, used to power stacker conveyor SC-2, with a maximum rated output of 85 hp-hr.

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

**New Source Performance Standards (NSPS) Requirements [326 IAC 2-7-5(1)]**

E.1.1 General Provisions Relating to New Source Performance Standards [326 IAC 12-1] [40 CFR Part 60, Subpart A]

(a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60 Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1 for the diesel fired engines G-1, G-2, and G-3 except as otherwise specified in 40 CFR Part 60, Subpart IIII.

(b) Pursuant to 40 CFR 60.19, the Permittee shall submit all required notifications and reports to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204

and

Northwest Regional Office
8380 Louisiana Street
Merrillville, IN 46410

E.1.2 Standards of Performance for Stationary Compression Ignition Internal Combustion Engines [40 CFR Part 60, Subpart IIII] [326 IAC 12]

Pursuant to 40 CFR Part 60, Subpart IIII, the Permittee shall comply with the provisions of Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, which are incorporated by reference as 326 IAC 12, for the diesel fired engines G-1, G-2, and G-3 as follows:

(1) 40 CFR 60.4200 (a)(1)(i), (a)(2), and (a)(3)
(2) 40 CFR 60.4200(c)
(3) 40 CFR 60.4200(d)
(4) 40 CFR 60.4204 (a) and (b)
(5) 40 CFR 60.4205 (a) and (b)
(6) 40 CFR 60.4206
(7) 40 CFR 60.4207 (a), (b), and (c)
(8) 40 CFR 60.4208 (a), (b), (c), (d), (e), (g), (h)
(9) 40 CFR 60.4209

(10) 40 CFR 60.4211 (a), (b), and (c)
(11) 40 CFR 60.4212
(12) 40 CFR 60.4213
(13) 40 CFR 60.4214 (a) and (c)
(14) 40 CFR 60.4218
(15) 40 CFR 60.4219

Table 1 to Subpart IIII of Part 60
Table 2 to Subpart IIII of Part 60
Table 3 to Subpart IIII of Part 60
Table 4 to Subpart IIII of Part 60
Table 5 to Subpart IIII of Part 60
Table 8 to Subpart IIII of Part 60

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
# OFFICE OF AIR QUALITY

## PART 70 OPERATING PERMIT
## CERTIFICATION

Source Name: J. L. Smith Services DBA American Crushing & Recycling
Source Address: One North Broadway, Gary, Indiana 46402
Mailing Address: 2484 Lindair Drive, Springfield, Ohio 45502
Permit No.: 089-23525-00509

**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: |
| Phone: |
| Date: |

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
# OFFICE OF AIR QUALITY

**COMPLIANCE AND ENFORCEMENT BRANCH**
**100 North Senate Avenue**
**Indianapolis, Indiana 46204-2251**
**Phone: 317-233-0178**
**Fax: 317-233-6865**

## PART 70 OPERATING PERMIT
## EMERGENCY OCCURRENCE REPORT

Source Name: J. L. Smith Services DBA American Crushing & Recycling
Source Address: One North Broadway, Gary, Indiana 46402
Mailing Address: 2484 Lindair Drive, Springfield, Ohio 45502
Permit No.: 089-23525-00509

**This form consists of 2 pages** **Page 1 of 2**

☐ This is an emergency as defined in 326 IAC 2-7-1(12)

X The Permittee must notify the Office of Air Quality (OAQ), within four (**4**) business hours (1-800-451-6027 or 317-233-0178, ask for Compliance and Enforcement Branch); and

X The Permittee must submit notice in writing or by facsimile within two (**2**) working days (Facsimile Number: 317-233-6865), 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 |
| 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 AND ENFORCEMENT BRANCH

## Part 70 Quarterly Report

| | |
|---|---|
| Source Name: | J. L. Smith Services DBA American Crushing & Recycling |
| Source Address: | One North Broadway, Gary, Indiana 46402 |
| Mailing Address: | 2484 Lindair Drive, Springfield, Ohio 45502 |
| Part 70 Operating Permit No.: | 089-23525-00509 |
| Facility: | Source-wide |
| Parameter: | Slag processed |
| Limit: | 430,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month |

QUARTER: _____ YEAR: _____

| Month | Slag Processed (tons) | Slag Processed (tons) | Slag Processed (tons) |
|---|---|---|---|
| | This Month | Previous 11 Months | 12 Month Total |
| Month 1 | | | |
| Month 2 | | | |
| Month 3 | | | |

No deviation occurred in this quarter.

Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
# OFFICE OF AIR QUALITY
# COMPLIANCE AND ENFORCEMENT BRANCH

## Part 70 Quarterly Report

| | |
|---|---|
| Source Name: | J. L. Smith Services DBA American Crushing & Recycling |
| Source Address: | One North Broadway, Gary, Indiana 46402 |
| Mailing Address: | 2484 Lindair Drive, Springfield, Ohio 45502 |
| Part 70 Operating Permit No.: | 089-23525-00509 |
| Facility: | Source-wide |
| Parameter: | Sand processed |
| Limit: | 129,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month |

QUARTER: _____ YEAR: _____

| Month | Sand Processed (tons) | Sand Processed (tons) | Sand Processed (tons) |
|---|---|---|---|
| | This Month | Previous 11 Months | 12 Month Total |
| Month 1 | | | |
| Month 2 | | | |
| Month 3 | | | |

No deviation occurred in this quarter.

Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
# OFFICE OF AIR QUALITY
# COMPLIANCE AND ENFORCEMENT BRANCH

## Part 70 Quarterly Report

| | |
|---|---|
| Source Name: | J. L. Smith Services DBA American Crushing & Recycling |
| Source Address: | One North Broadway, Gary, Indiana 46402 |
| Mailing Address: | 2484 Lindair Drive, Springfield, Ohio 45502 |
| Part 70 Operating Permit No.: | 089-23525-00509 |
| Facility: | Diesel Generators G-1, G-2, G-3 |
| Parameter: | Diesel Fuel Consumption, Total |
| Limit: | 130,000 gallons per twelve (12) consecutive month period with compliance determined at the end of each month |

QUARTER: _____ YEAR: _____

| Month | Diesel Fuel Consumed (gallons) | Diesel Fuel Consumed (gallons) | Diesel Fuel Consumed (gallons) |
|---|---|---|---|
| | This Month | Previous 11 Months | 12 Month Total |
| Month 1 | | | |
| Month 2 | | | |
| Month 3 | | | |

No deviation occurred in this quarter.

Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
# OFFICE OF AIR QUALITY
# COMPLIANCE AND ENFORCEMENT BRANCH

## PART 70 OPERATING PERMIT
## QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: J. L. Smith Services DBA American Crushing & Recycling
Source Address: One North Broadway, Gary, Indiana 46402
Mailing Address: 2484 Lindair Drive, Springfield, Ohio 45502
Permit No.: 089-23525-00509

**Months: _____ to _____ Year: _____**



| | |
|---|---|
| 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". | |
| ☐ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD. | |
| ☐ 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

# Attachment A
# Fugitive Dust Control Plan

## J.L.Smith Services DBA American Crushing & Recycling Company

11 South Main Street
Milton, Ohio 45383

TELEPHONE (937) 698-8016
FACSIMILIE (937) 325-2052

FUGITIVE DUST CONTROL PLAN
Stationary Crushing and Screening Plant
Plant ID Number 089-23525-00509

Primary Contact
Victoria V. Hathaway
Manager of Operations
11 South Main Street
Milton, Ohio 45383
(937) 698-8016

Roadway Control

(a) Paved roadways are the responsibility of the steel mill. Unpaved roadways at the plant are inspected each day of operation to determine if dust suppression is required.

(b) Water sprays from a water truck may be applied as needed to wet down unpaved areas, except during periods of rain, ice or snow.

Crushing, Screening, Transfer and Material Handling Activities, Storage Piles Control Measures

Water sprays will be installed on the crusher. The screen is below the crusher and moisture will carry-over to the screen and conveyors. If excess emissions are observed, operations will stop and control methods as specified below will be employed:

(c) Water sprays may be applied continuously on the crusher and screen to comply with the opacity limits, to get its moisture level above 10%.

(d) Carry-over from the application of water will abate emissions from transfer activities, storage piles, and material transportation activities.

(e) Water will not be applied during freezing weather, typically between October 15 and April 15.

(f) Compliance with 10% opacity limit will be ascertained by testing using certified test methods e.g. U.S. EPA Method 5 or Method 22, as deemed necessary.

**Attachment B**

**NSPS, Subpart IIII**

**J.L. Smith Services dba American Crushing & Recycling,**
**an on-site contractor for U.S. Steel - Gary Works**
**One North Broadway**
**Gary, Indiana 46402**

**Significant Source Modification No.: 089-28324-00509**
**Significant Permit Modification No.: 089-28415-00509**

**Title 40: Protection of Environment**

PART 60—STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES

**Subpart IIII—Standards of Performance for Stationary Compression Ignition Internal Combustion Engines**

**Source:** 71 FR 39172, July 11, 2006, unless otherwise noted.

**What This Subpart Covers**

**§ 60.4200 Am I subject to this subpart?**

(a) The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary compression ignition (CI) internal combustion engines (ICE) as specified in paragraphs (a)(1) through (3) of this section. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.

(1) Manufacturers of stationary CI ICE with a displacement of less than 30 liters per cylinder where the model year is:

(i) 2007 or later, for engines that are not fire pump engines,

(ii) The model year listed in table 3 to this subpart or later model year, for fire pump engines.

(2) Owners and operators of stationary CI ICE that commence construction after July 11, 2005 where the stationary CI ICE are:

(i) Manufactured after April 1, 2006 and are not fire pump engines, or

(ii) Manufactured as a certified National Fire Protection Association (NFPA) fire pump engine after July 1, 2006.

(3) Owners and operators of stationary CI ICE that modify or reconstruct their stationary CI ICE after July 11, 2005.

(b) The provisions of this subpart are not applicable to stationary CI ICE being tested at a stationary CI ICE test cell/stand.

(c) If you are an owner or operator of an area source subject to this subpart, you are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71, provided you are not required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart applicable to area sources.

(d) Stationary CI ICE may be eligible for exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C (or the exemptions described in 40 CFR part 89, subpart J and 40 CFR part 94, subpart J, for engines that would need to be certified to standards in those parts), except that owners and operators, as well as manufacturers, may be eligible to request an exemption for national security.

## Emission Standards for Manufacturers

### § 60.4201 What emission standards must I meet for non-emergency engines if I am a stationary CI internal combustion engine manufacturer?

(a) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later non-emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 kilowatt (KW) (3,000 horsepower (HP)) and a displacement of less than 10 liters per cylinder to the certification emission standards for new nonroad CI engines in 40 CFR 89.112, 40 CFR 89.113, 40 CFR 1039.101, 40 CFR 1039.102, 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, and 40 CFR 1039.115, as applicable, for all pollutants, for the same model year and maximum engine power.

(b) Stationary CI internal combustion engine manufacturers must certify their 2007 through 2010 model year non-emergency stationary CI ICE with a maximum engine power greater than 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder to the emission standards in table 1 to this subpart, for all pollutants, for the same maximum engine power.

(c) Stationary CI internal combustion engine manufacturers must certify their 2011 model year and later non-emergency stationary CI ICE with a maximum engine power greater than 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder to the certification emission standards for new nonroad CI engines in 40 CFR 1039.101, 40 CFR 1039.102, 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, and 40 CFR 1039.115, as applicable, for all pollutants, for the same maximum engine power.

(d) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later non-emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder to the certification emission standards for new marine CI engines in 40 CFR 94.8, as applicable, for all pollutants, for the same displacement and maximum engine power.

### § 60.4202 What emission standards must I meet for emergency engines if I am a stationary CI internal combustion engine manufacturer?

(a) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder that are not fire pump engines to the emission standards specified in paragraphs (a)(1) through (2) of this section.

(1) For engines with a maximum engine power less than 37 KW (50 HP):

(i) The certification emission standards for new nonroad CI engines for the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants for model year 2007 engines, and

(ii) The certification emission standards for new nonroad CI engines in 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, 40 CFR 1039.115, and table 2 to this subpart, for 2008 model year and later engines.

(2) For engines with a maximum engine power greater than or equal to 37 KW (50 HP), the certification emission standards for new nonroad CI engines for the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants beginning in model year 2007.

(b) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power greater than 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder that are not fire pump engines to the emission standards specified in paragraphs (b)(1) through (2) of this section.

(1) For 2007 through 2010 model years, the emission standards in table 1 to this subpart, for all pollutants, for the same maximum engine power.

(2) For 2011 model year and later, the certification emission standards for new nonroad CI engines for engines of the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants.

(c) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder that are not fire pump engines to the certification emission standards for new marine CI engines in 40 CFR 94.8, as applicable, for all pollutants, for the same displacement and maximum engine power.

(d) Beginning with the model years in table 3 to this subpart, stationary CI internal combustion engine manufacturers must certify their fire pump stationary CI ICE to the emission standards in table 4 to this subpart, for all pollutants, for the same model year and NFPA nameplate power.

### § 60.4203 How long must my engines meet the emission standards if I am a stationary CI internal combustion engine manufacturer?

Engines manufactured by stationary CI internal combustion engine manufacturers must meet the emission standards as required in §§60.4201 and 60.4202 during the useful life of the engines.

## Emission Standards for Owners and Operators

### § 60.4204 What emission standards must I meet for non-emergency engines if I am an owner or operator of a stationary CI internal combustion engine?

(a) Owners and operators of pre-2007 model year non-emergency stationary CI ICE with a displacement of less than 10 liters per cylinder must comply with the emission standards in table 1 to this subpart. Owners and operators of pre-2007 model year non-emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder must comply with the emission standards in 40 CFR 94.8(a)(1).

(b) Owners and operators of 2007 model year and later non-emergency stationary CI ICE with a displacement of less than 30 liters per cylinder must comply with the emission standards for new CI engines in §60.4201 for their 2007 model year and later stationary CI ICE, as applicable.

(c) Owners and operators of non-emergency stationary CI ICE with a displacement of greater than or equal to 30 liters per cylinder must meet the requirements in paragraphs (c)(1) and (2) of this section.

(1) Reduce nitrogen oxides ($NO_X$) emissions by 90 percent or more, or limit the emissions of $NO_X$in the stationary CI internal combustion engine exhaust to 1.6 grams per KW-hour (g/KW-hr) (1.2 grams per HP-hour (g/HP-hr)).

(2) Reduce particulate matter (PM) emissions by 60 percent or more, or limit the emissions of PM in the stationary CI internal combustion engine exhaust to 0.15 g/KW-hr (0.11 g/HP-hr).

### § 60.4205 What emission standards must I meet for emergency engines if I am an owner or operator of a stationary CI internal combustion engine?

(a) Owners and operators of pre-2007 model year emergency stationary CI ICE with a displacement of less than 10 liters per cylinder that are not fire pump engines must comply with the emission standards in table 1 to this subpart. Owners and operators of pre-2007 model year non-emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards in 40 CFR 94.8(a)(1).

(b) Owners and operators of 2007 model year and later emergency stationary CI ICE with a displacement of less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards for new nonroad CI engines in §60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE.

(c) Owners and operators of fire pump engines with a displacement of less than 30 liters per cylinder must comply with the emission standards in table 4 to this subpart, for all pollutants.

(d) Owners and operators of emergency stationary CI ICE with a displacement of greater than or equal to 30 liters per cylinder must meet the requirements in paragraphs (d)(1) and (2) of this section.

(1) Reduce $NO_X$emissions by 90 percent or more, or limit the emissions of $NO_X$in the stationary CI internal combustion engine exhaust to 1.6 grams per KW-hour (1.2 grams per HP-hour).

(2) Reduce PM emissions by 60 percent or more, or limit the emissions of PM in the stationary CI internal combustion engine exhaust to 0.15 g/KW-hr (0.11 g/HP-hr).

### § 60.4206 How long must I meet the emission standards if I am an owner or operator of a stationary CI internal combustion engine?

Owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in §§60.4204 and 60.4205 according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer, over the entire life of the engine.

## Fuel Requirements for Owners and Operators

### § 60.4207 What fuel requirements must I meet if I am an owner or operator of a stationary CI internal combustion engine subject to this subpart?

(a) Beginning October 1, 2007, owners and operators of stationary CI ICE subject to this subpart that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(a).

(b) Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel.

(c) Owners and operators of pre-2011 model year stationary CI ICE subject to this subpart may petition the Administrator for approval to use remaining non-compliant fuel that does not meet the fuel requirements of paragraphs (a) and (b) of this section beyond the dates required for the purpose of using up existing fuel inventories. If approved, the petition will be valid for a period of up to 6 months. If additional time is needed, the owner or operator is required to submit a new petition to the Administrator.

(d) Owners and operators of pre-2011 model year stationary CI ICE subject to this subpart that are located in areas of Alaska not accessible by the Federal Aid Highway System may petition the Administrator for approval to use any fuels mixed with used lubricating oil that do not meet the fuel requirements of paragraphs (a) and (b) of this section. Owners and operators must demonstrate in their petition to the Administrator that there is no other place to use the lubricating oil. If approved, the petition will be valid for a period of up to 6 months. If additional time is needed, the owner or operator is required to submit a new petition to the Administrator.

(e) Stationary CI ICE that have a national security exemption under §60.4200(d) are also exempt from the fuel requirements in this section.

## Other Requirements for Owners and Operators

### § 60.4208 What is the deadline for importing or installing stationary CI ICE produced in the previous model year?

(a) After December 31, 2008, owners and operators may not install stationary CI ICE (excluding fire pump engines) that do not meet the applicable requirements for 2007 model year engines.

(b) After December 31, 2009, owners and operators may not install stationary CI ICE with a maximum engine power of less than 19 KW (25 HP) (excluding fire pump engines) that do not meet the applicable requirements for 2008 model year engines.

(c) After December 31, 2014, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 19 KW (25 HP) and less than 56 KW (75 HP) that do not meet the applicable requirements for 2013 model year non-emergency engines.

(d) After December 31, 2013, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 56 KW (75 HP) and less than 130 KW (175 HP) that do not meet the applicable requirements for 2012 model year non-emergency engines.

(e) After December 31, 2012, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 130 KW (175 HP), including those above 560 KW (750 HP), that do not meet the applicable requirements for 2011 model year non-emergency engines.

(f) After December 31, 2016, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 560 KW (750 HP) that do not meet the applicable requirements for 2015 model year non-emergency engines.

(g) In addition to the requirements specified in §§60.4201, 60.4202, 60.4204, and 60.4205, it is prohibited to import stationary CI ICE with a displacement of less than 30 liters per cylinder that do not meet the applicable requirements specified in paragraphs (a) through (f) of this section after the dates specified in paragraphs (a) through (f) of this section.

(h) The requirements of this section do not apply to owners or operators of stationary CI ICE that have been modified, reconstructed, and do not apply to engines that were removed from one existing location and reinstalled at a new location.

### § 60.4209 What are the monitoring requirements if I am an owner or operator of a stationary CI internal combustion engine?

If you are an owner or operator, you must meet the monitoring requirements of this section. In addition, you must also meet the monitoring requirements specified in §60.4211.

(a) If you are an owner or operator of an emergency stationary CI internal combustion engine, you must install a non-resettable hour meter prior to startup of the engine.

(b) If you are an owner or operator of a stationary CI internal combustion engine equipped with a diesel particulate filter to comply with the emission standards in §60.4204, the diesel particulate filter must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached.

## Compliance Requirements

### § 60.4210 What are my compliance requirements if I am a stationary CI internal combustion engine manufacturer?

(a) Stationary CI internal combustion engine manufacturers must certify their stationary CI ICE with a displacement of less than 10 liters per cylinder to the emission standards specified in §60.4201(a) through (c) and §60.4202(a), (b) and (d) using the certification procedures required in 40 CFR part 89, subpart B, or 40 CFR part 1039, subpart C, as applicable, and must test their engines as specified in those parts. For the purposes of this subpart, engines certified to the standards in table 1 to this subpart shall be subject to the same requirements as engines certified to the standards in 40 CFR part 89. For the purposes of this subpart, engines certified to the standards in table 4 to this subpart shall be subject to the same requirements as engines certified to the standards in 40 CFR part 89, except

that engines with NFPA nameplate power of less than 37 KW (50 HP) certified to model year 2011 or later standards shall be subject to the same requirements as engines certified to the standards in 40 CFR part 1039.

(b) Stationary CI internal combustion engine manufacturers must certify their stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder to the emission standards specified in §60.4201(d) and §60.4202(c) using the certification procedures required in 40 CFR part 94 subpart C, and must test their engines as specified in 40 CFR part 94.

(c) Stationary CI internal combustion engine manufacturers must meet the requirements of 40 CFR 1039.120, 40 CFR 1039.125, 40 CFR 1039.130, 40 CFR 1039.135, and 40 CFR part 1068 for engines that are certified to the emission standards in 40 CFR part 1039. Stationary CI internal combustion engine manufacturers must meet the corresponding provisions of 40 CFR part 89 or 40 CFR part 94 for engines that would be covered by that part if they were nonroad (including marine) engines. Labels on such engines must refer to stationary engines, rather than or in addition to nonroad or marine engines, as appropriate. Stationary CI internal combustion engine manufacturers must label their engines according to paragraphs (c)(1) through (3) of this section.

(1) Stationary CI internal combustion engines manufactured from January 1, 2006 to March 31, 2006 (January 1, 2006 to June 30, 2006 for fire pump engines), other than those that are part of certified engine families under the nonroad CI engine regulations, must be labeled according to 40 CFR 1039.20.

(2) Stationary CI internal combustion engines manufactured from April 1, 2006 to December 31, 2006 (or, for fire pump engines, July 1, 2006 to December 31 of the year preceding the year listed in table 3 to this subpart) must be labeled according to paragraphs (c)(2)(i) through (iii) of this section:

(i) Stationary CI internal combustion engines that are part of certified engine families under the nonroad regulations must meet the labeling requirements for nonroad CI engines, but do not have to meet the labeling requirements in 40 CFR 1039.20.

(ii) Stationary CI internal combustion engines that meet Tier 1 requirements (or requirements for fire pumps) under this subpart, but do not meet the requirements applicable to nonroad CI engines must be labeled according to 40 CFR 1039.20. The engine manufacturer may add language to the label clarifying that the engine meets Tier 1 requirements (or requirements for fire pumps) of this subpart.

(iii) Stationary CI internal combustion engines manufactured after April 1, 2006 that do not meet Tier 1 requirements of this subpart, or fire pumps engines manufactured after July 1, 2006 that do not meet the requirements for fire pumps under this subpart, may not be used in the U.S. If any such engines are manufactured in the U.S. after April 1, 2006 (July 1, 2006 for fire pump engines), they must be exported or must be brought into compliance with the appropriate standards prior to initial operation. The export provisions of 40 CFR 1068.230 would apply to engines for export and the manufacturers must label such engines according to 40 CFR 1068.230.

(3) Stationary CI internal combustion engines manufactured after January 1, 2007 (for fire pump engines, after January 1 of the year listed in table 3 to this subpart, as applicable) must be labeled according to paragraphs (c)(3)(i) through (iii) of this section.

(i) Stationary CI internal combustion engines that meet the requirements of this subpart and the corresponding requirements for nonroad (including marine) engines of the same model year and HP must be labeled according to the provisions in part 89, 94 or 1039, as appropriate.

(ii) Stationary CI internal combustion engines that meet the requirements of this subpart, but are not certified to the standards applicable to nonroad (including marine) engines of the same model year and HP must be labeled according to the provisions in part 89, 94 or 1039, as appropriate, but the words “stationary” must be included instead of “nonroad” or “marine” on the label. In addition, such engines must be labeled according to 40 CFR 1039.20.

(iii) Stationary CI internal combustion engines that do not meet the requirements of this subpart must be labeled according to 40 CFR 1068.230 and must be exported under the provisions of 40 CFR 1068.230.

(d) An engine manufacturer certifying an engine family or families to standards under this subpart that are identical to standards applicable under parts 89, 94, or 1039 for that model year may certify any such family that contains both nonroad (including marine) and stationary engines as a single engine family and/or may include any such family containing stationary engines in the averaging, banking and trading provisions applicable for such engines under those parts.

(e) Manufacturers of engine families discussed in paragraph (d) of this section may meet the labeling requirements referred to in paragraph (c) of this section for stationary CI ICE by either adding a separate label containing the information required in paragraph (c) of this section or by adding the words “and stationary” after the word “nonroad” or “marine,” as appropriate, to the label.

(f) Starting with the model years shown in table 5 to this subpart, stationary CI internal combustion engine manufacturers must add a permanent label stating that the engine is for stationary emergency use only to each new emergency stationary CI internal combustion engine greater than or equal to 19 KW (25 HP) that meets all the emission standards for emergency engines in §60.4202 but does not meet all the emission standards for non-emergency engines in §60.4201. The label must be added according to the labeling requirements specified in 40 CFR 1039.135(b). Engine manufacturers must specify in the owner's manual that operation of emergency engines is limited to emergency operations and required maintenance and testing.

(g) Manufacturers of fire pump engines may use the test cycle in table 6 to this subpart for testing fire pump engines and may test at the NFPA certified nameplate HP, provided that the engine is labeled as “Fire Pump Applications Only”.

(h) Engine manufacturers, including importers, may introduce into commerce uncertified engines or engines certified to earlier standards that were manufactured before the new or changed standards took effect until inventories are depleted, as long as such engines are part of normal inventory. For example, if the engine manufacturers' normal industry practice is to keep on hand a one-month supply of engines based on its projected sales, and a new tier of standards starts to apply for the 2009 model year, the engine manufacturer may manufacture engines based on the normal inventory requirements late in the 2008 model year, and sell those engines for installation. The engine manufacturer may not circumvent the provisions of §§60.4201 or 60.4202 by stockpiling engines that are built before new or changed standards take effect. Stockpiling of such engines beyond normal industry practice is a violation of this subpart.

(i) The replacement engine provisions of 40 CFR 89.1003(b)(7), 40 CFR 94.1103(b)(3), 40 CFR 94.1103(b)(4) and 40 CFR 1068.240 are applicable to stationary CI engines replacing existing equipment that is less than 15 years old.

### § 60.4211 What are my compliance requirements if I am an owner or operator of a stationary CI internal combustion engine?

(a) If you are an owner or operator and must comply with the emission standards specified in this subpart, you must operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. In addition, owners and operators may only change those settings that are permitted by the manufacturer. You must also meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you.

(b) If you are an owner or operator of a pre-2007 model year stationary CI internal combustion engine and must comply with the emission standards specified in §§60.4204(a) or 60.4205(a), or if you are an owner or operator of a CI fire pump engine that is manufactured prior to the model years in table 3 to this subpart and must comply with the emission standards specified in §60.4205(c), you must demonstrate compliance according to one of the methods specified in paragraphs (b)(1) through (5) of this section.

(1) Purchasing an engine certified according to 40 CFR part 89 or 40 CFR part 94, as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications.

(2) Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in this subpart and these methods must have been followed correctly.

(3) Keeping records of engine manufacturer data indicating compliance with the standards.

(4) Keeping records of control device vendor data indicating compliance with the standards.

(5) Conducting an initial performance test to demonstrate compliance with the emission standards according to the requirements specified in §60.4212, as applicable.

(c) If you are an owner or operator of a 2007 model year and later stationary CI internal combustion engine and must comply with the emission standards specified in §60.4204(b) or §60.4205(b), or if you are an owner or operator of a CI fire pump engine that is manufactured during or after the model year that applies to your fire pump engine power rating in table 3 to this subpart and must comply with the emission standards specified in §60.4205(c), you must comply by purchasing an engine certified to the emission standards in §60.4204(b), or §60.4205(b) or (c), as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine must be installed and configured according to the manufacturer's specifications.

(d) If you are an owner or operator and must comply with the emission standards specified in §60.4204(c) or §60.4205(d), you must demonstrate compliance according to the requirements specified in paragraphs (d)(1) through (3) of this section.

(1) Conducting an initial performance test to demonstrate initial compliance with the emission standards as specified in §60.4213.

(2) Establishing operating parameters to be monitored continuously to ensure the stationary internal combustion engine continues to meet the emission standards. The owner or operator must petition the Administrator for approval of operating parameters to be monitored continuously. The petition must include the information described in paragraphs (d)(2)(i) through (v) of this section.

(i) Identification of the specific parameters you propose to monitor continuously;

(ii) A discussion of the relationship between these parameters and $NO_X$and PM emissions, identifying how the emissions of these pollutants change with changes in these parameters, and how limitations on these parameters will serve to limit $NO_X$and PM emissions;

(iii) A discussion of how you will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations;

(iv) A discussion identifying the methods and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and

(v) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.

(3) For non-emergency engines with a displacement of greater than or equal to 30 liters per cylinder, conducting annual performance tests to demonstrate continuous compliance with the emission standards as specified in §60.4213.

(e) Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. Anyone may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local

standards require maintenance and testing of emergency ICE beyond 100 hours per year. For owners and operators of emergency engines meeting standards under §60.4205 but not §60.4204, any operation other than emergency operation, and maintenance and testing as permitted in this section, is prohibited.

**Testing Requirements for Owners and Operators**

**§ 60.4212 What test methods and other procedures must I use if I am an owner or operator of a stationary CI internal combustion engine with a displacement of less than 30 liters per cylinder?**

Owners and operators of stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests pursuant to this subpart must do so according to paragraphs (a) through (d) of this section.

(a) The performance test must be conducted according to the in-use testing procedures in 40 CFR part 1039, subpart F.

(b) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR part 1039 must not exceed the not-to-exceed (NTE) standards for the same model year and maximum engine power as required in 40 CFR 1039.101(e) and 40 CFR 1039.102(g)(1), except as specified in 40 CFR 1039.104(d). This requirement starts when NTE requirements take effect for nonroad diesel engines under 40 CFR part 1039.

(c) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8, as applicable, must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in 40 CFR 89.112 or 40 CFR 94.8, as applicable, determined from the following equation:

$$\text{NTE requirement for each pollutant} = (1.25) \times (\text{STD}) \qquad \text{(Eq. 1)}$$

Where:

STD = The standard specified for that pollutant in 40 CFR 89.112 or 40 CFR 94.8, as applicable.

Alternatively, stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8 may follow the testing procedures specified in §60.4213 of this subpart, as appropriate.

(d) Exhaust emissions from stationary CI ICE that are complying with the emission standards for pre-2007 model year engines in §60.4204(a), §60.4205(a), or §60.4205(c) must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in §60.4204(a), §60.4205(a), or §60.4205(c), determined from the equation in paragraph (c) of this section.

Where:

STD = The standard specified for that pollutant in §60.4204(a), §60.4205(a), or §60.4205(c).

Alternatively, stationary CI ICE that are complying with the emission standards for pre-2007 model year engines in §60.4204(a), §60.4205(a), or §60.4205(c) may follow the testing procedures specified in §60.4213, as appropriate.

**§ 60.4213 What test methods and other procedures must I use if I am an owner or operator of a stationary CI internal combustion engine with a displacement of greater than or equal to 30 liters per cylinder?**

Owners and operators of stationary CI ICE with a displacement of greater than or equal to 30 liters per cylinder must conduct performance tests according to paragraphs (a) through (d) of this section.

(a) Each performance test must be conducted according to the requirements in §60.8 and under the specific conditions that this subpart specifies in table 7. The test must be conducted within 10 percent of 100 percent peak (or the highest achievable) load.

(b) You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in §60.8(c).

(c) You must conduct three separate test runs for each performance test required in this section, as specified in §60.8(f). Each test run must last at least 1 hour.

(d) To determine compliance with the percent reduction requirement, you must follow the requirements as specified in paragraphs (d)(1) through (3) of this section.

(1) You must use Equation 2 of this section to determine compliance with the percent reduction requirement:

$$\frac{C_i - C_o}{C_i} \times 100 = R \qquad \text{(Eq. 2)}$$

Where:

$C_i$= concentration of $NO_X$or PM at the control device inlet,

$C_o$= concentration of $NO_X$or PM at the control device outlet, and

R = percent reduction of $NO_X$or PM emissions.

(2) You must normalize the $NO_X$or PM concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen ($O_2$) using Equation 3 of this section, or an equivalent percent carbon dioxide ($CO_2$) using the procedures described in paragraph (d)(3) of this section.

$$C_{adj} = C_d \frac{5.9}{20.9 - \% O_2} \qquad \text{(Eq. 3)}$$

Where:

$C_{adj}$= Calculated $NO_X$or PM concentration adjusted to 15 percent $O_2$.

$C_d$= Measured concentration of $NO_X$or PM, uncorrected.

5.9 = 20.9 percent $O_2$−15 percent $O_2$, the defined $O_2$correction value, percent.

$\%O_2$= Measured $O_2$concentration, dry basis, percent.

(3) If pollutant concentrations are to be corrected to 15 percent $O_2$and $CO_2$concentration is measured in lieu of $O_2$concentration measurement, a $CO_2$correction factor is needed. Calculate the $CO_2$correction factor as described in paragraphs (d)(3)(i) through (iii) of this section.

(i) Calculate the fuel-specific $F_o$value for the fuel burned during the test using values obtained from Method 19, Section 5.2, and the following equation:

$$F_o = \frac{0.209 F_d}{F_c} \qquad \text{(Eq. 4)}$$

Where:

$F_o$= Fuel factor based on the ratio of $O_2$volume to the ultimate $CO_2$volume produced by the fuel at zero percent excess air.

0.209 = Fraction of air that is $O_2$, percent/100.

$F_d$= Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, $dsm^3$ /J (dscf/$10^6$ Btu).

$F_c$= Ratio of the volume of $CO_2$produced to the gross calorific value of the fuel from Method 19, $dsm^3$ /J (dscf/$10^6$ Btu).

(ii) Calculate the $CO_2$correction factor for correcting measurement data to 15 percent $O_2$, as follows:

$$X_{CO_2} = \frac{5.9}{F_o} \qquad \text{(Eq. 5)}$$

Where:

$X_{CO2}$= $CO_2$correction factor, percent.

5.9 = 20.9 percent $O_2$−15 percent $O_2$, the defined $O_2$correction value, percent.

(iii) Calculate the $NO_X$and PM gas concentrations adjusted to 15 percent $O_2$using $CO_2$as follows:

$$C_{adj} = C_d \frac{X_{CO_2}}{\%CO_2} \qquad \text{(Eq. 6)}$$

Where:

$C_{adj}$= Calculated $NO_X$or PM concentration adjusted to 15 percent $O_2$.

$C_d$= Measured concentration of $NO_X$or PM, uncorrected.

$\%CO_2$= Measured $CO_2$concentration, dry basis, percent.

(e) To determine compliance with the $NO_X$mass per unit output emission limitation, convert the concentration of $NO_X$in the engine exhaust using Equation 7 of this section:

$$ER = \frac{C_d \times 1.912 \times 10^{-3} \times Q \times T}{\text{KW-hour}} \qquad \text{(Eq. 7)}$$

Where:

ER = Emission rate in grams per KW-hour.

$C_d$= Measured $NO_X$concentration in ppm.

$1.912x10^{-3}$= Conversion constant for ppm $NO_X$to grams per standard cubic meter at 25 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meter per hour.

T = Time of test run, in hours.

KW-hour = Brake work of the engine, in KW-hour.

(f) To determine compliance with the PM mass per unit output emission limitation, convert the concentration of PM in the engine exhaust using Equation 8 of this section:

$$ER = \frac{C_{adj} \times Q \times T}{\text{KW-hour}} \qquad \text{(Eq. 8)}$$

Where:

ER = Emission rate in grams per KW-hour.

$C_{adj}$= Calculated PM concentration in grams per standard cubic meter.

Q = Stack gas volumetric flow rate, in standard cubic meter per hour.

T = Time of test run, in hours.

KW-hour = Energy output of the engine, in KW.

**Notification, Reports, and Records for Owners and Operators**

**§ 60.4214 What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary CI internal combustion engine?**

(a) Owners and operators of non-emergency stationary CI ICE that are greater than 2,237 KW (3,000 HP), or have a displacement of greater than or equal to 10 liters per cylinder, or are pre-2007 model year engines that are greater than 130 KW (175 HP) and not certified, must meet the requirements of paragraphs (a)(1) and (2) of this section.

(1) Submit an initial notification as required in §60.7(a)(1). The notification must include the information in paragraphs (a)(1)(i) through (v) of this section.

(i) Name and address of the owner or operator;

(ii) The address of the affected source;

(iii) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;

(iv) Emission control equipment; and

(v) Fuel used.

(2) Keep records of the information in paragraphs (a)(2)(i) through (iv) of this section.

(i) All notifications submitted to comply with this subpart and all documentation supporting any notification.

(ii) Maintenance conducted on the engine.

(iii) If the stationary CI internal combustion is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards.

(iv) If the stationary CI internal combustion is not a certified engine, documentation that the engine meets the emission standards.

(b) If the stationary CI internal combustion engine is an emergency stationary internal combustion engine, the owner or operator is not required to submit an initial notification. Starting with the model years in table 5 to this subpart, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time.

(c) If the stationary CI internal combustion engine is equipped with a diesel particulate filter, the owner or operator must keep records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached.

## Special Requirements

### § 60.4215 What requirements must I meet for engines used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands?

(a) Stationary CI ICE that are used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands are required to meet the applicable emission standards in §60.4205. Non-emergency stationary CI ICE with a displacement of greater than or equal to 30 liters per cylinder, must meet the applicable emission standards in §60.4204(c).

(b) Stationary CI ICE that are used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands are not required to meet the fuel requirements in §60.4207.

### § 60.4216 What requirements must I meet for engines used in Alaska?

(a) Prior to December 1, 2010, owners and operators of stationary CI engines located in areas of Alaska not accessible by the Federal Aid Highway System should refer to 40 CFR part 69 to determine the diesel fuel requirements applicable to such engines.

(b) The Governor of Alaska may submit for EPA approval, by no later than January 11, 2008, an alternative plan for implementing the requirements of 40 CFR part 60, subpart IIII, for public-sector electrical utilities located in rural areas of Alaska not accessible by the Federal Aid Highway System. This alternative plan must be based on the requirements of section 111 of the Clean Air Act including any increased risks to human health and the environment and must also be based on the unique circumstances related to remote power generation, climatic conditions, and serious economic impacts resulting from implementation of 40 CFR part 60, subpart IIII. If EPA approves by rulemaking process an alternative plan, the provisions as approved by EPA under that plan shall apply to the diesel engines used in new stationary internal combustion engines subject to this paragraph.

### § 60.4217 What emission standards must I meet if I am an owner or operator of a stationary internal combustion engine using special fuels?

(a) Owners and operators of stationary CI ICE that do not use diesel fuel, or who have been given authority by the Administrator under §60.4207(d) of this subpart to use fuels that do not meet the fuel requirements of paragraphs (a) and (b) of §60.4207, may petition the Administrator for approval of alternative emission standards, if they can demonstrate that they use a fuel that is not the fuel on which the manufacturer of the engine certified the engine and that the engine cannot meet the applicable standards required in §60.4202 or §60.4203 using such fuels.

(b) [Reserved]

## General Provisions

### § 60.4218 What parts of the General Provisions apply to me?

Table 8 to this subpart shows which parts of the General Provisions in §§60.1 through 60.19 apply to you.

Definitions

### § 60.4219 What definitions apply to this subpart?

As used in this subpart, all terms not defined herein shall have the meaning given them in the CAA and in subpart A of this part.

*Combustion turbine* means all equipment, including but not limited to the turbine, the fuel, air, lubrication and exhaust gas systems, control systems (except emissions control equipment), and any ancillary components and sub-components comprising any simple cycle combustion turbine, any regenerative/recuperative cycle combustion turbine, the combustion turbine portion of any cogeneration cycle combustion system, or the combustion turbine portion of any combined cycle steam/electric generating system.

*Compression ignition* means relating to a type of stationary internal combustion engine that is not a spark ignition engine.

*Diesel fuel* means any liquid obtained from the distillation of petroleum with a boiling point of approximately 150 to 360 degrees Celsius. One commonly used form is number 2 distillate oil.

*Diesel particulate filter* means an emission control technology that reduces PM emissions by trapping the particles in a flow filter substrate and periodically removes the collected particles by either physical action or by oxidizing (burning off) the particles in a process called regeneration.

*Emergency stationary internal combustion engine* means any stationary internal combustion engine whose operation is limited to emergency situations and required testing and maintenance. Examples include stationary ICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary ICE used to pump water in the case of fire or flood, etc. Stationary CI ICE used to supply power to an electric grid or that supply power as part of a financial arrangement with another entity are not considered to be emergency engines.

*Engine manufacturer* means the manufacturer of the engine. See the definition of “manufacturer” in this section.

*Fire pump engine* means an emergency stationary internal combustion engine certified to NFPA requirements that is used to provide power to pump water for fire suppression or protection.

*Manufacturer* has the meaning given in section 216(1) of the Act. In general, this term includes any person who manufactures a stationary engine for sale in the United States or otherwise introduces a new stationary engine into commerce in the United States. This includes importers who import stationary engines for sale or resale.

*Maximum engine power* means maximum engine power as defined in 40 CFR 1039.801.

*Model year* means either:

(1) The calendar year in which the engine was originally produced, or

(2) The annual new model production period of the engine manufacturer if it is different than the calendar year. This must include January 1 of the calendar year for which the model year is named. It may not begin before January 2 of the previous calendar year and it must end by December 31 of the named calendar year. For an engine that is converted to a stationary engine after being placed into service as a nonroad or other non-stationary engine, model year means the calendar year or new model production period in which the engine was originally produced.

*Other internal combustion engine* means any internal combustion engine, except combustion turbines, which is not a reciprocating internal combustion engine or rotary internal combustion engine.

*Reciprocating internal combustion engine* means any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work.

*Rotary internal combustion engine* means any internal combustion engine which uses rotary motion to convert heat energy into mechanical work.

*Spark ignition* means relating to a gasoline, natural gas, or liquefied petroleum gas fueled engine or any other type of engine with a spark plug (or other sparking device) and with operating characteristics significantly similar to the theoretical Otto combustion cycle. Spark ignition engines usually use a throttle to regulate intake air flow to control power during normal operation. Dual-fuel engines in which a liquid fuel (typically diesel fuel) is used for CI and gaseous fuel (typically natural gas) is used as the primary fuel at an annual average ratio of less than 2 parts diesel fuel to 100 parts total fuel on an energy equivalent basis are spark ignition engines.

*Stationary internal combustion engine* means any internal combustion engine, except combustion turbines, that converts heat energy into mechanical work and is not mobile. Stationary ICE differ from mobile ICE in that a stationary internal combustion engine is not a nonroad engine as defined at 40 CFR 1068.30 (excluding paragraph (2)(ii) of that definition), and is not used to propel a motor vehicle or a vehicle used solely for competition. Stationary ICE include reciprocating ICE, rotary ICE, and other ICE, except combustion turbines.

*Subpart* means 40 CFR part 60, subpart IIII.

*Useful life* means the period during which the engine is designed to properly function in terms of reliability and fuel consumption, without being remanufactured, specified as a number of hours of operation or calendar years, whichever comes first. The values for useful life for stationary CI ICE with a displacement of less than 10 liters per cylinder are given in 40 CFR 1039.101(g). The values for useful life for stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder are given in 40 CFR 94.9(a).

**Table 1 to Subpart IIII of Part 60—Emission Standards for Stationary Pre-2007 Model Year Engines With a Displacement of <10 Liters per Cylinder and 2007–2010 Model Year Engines >2,237 KW (3,000 HP) and With a Displacement of <10 Liters per Cylinder**

[As stated in §§60.4201(b), 60.4202(b), 60.4204(a), and 60.4205(a), you must comply with the following emission standards]

| Maximum engine power | Emission standards for stationary pre-2007 model year engines with a displacement of <10 liters per cylinder and 2007–2010 model year engines >2,237 KW (3,000 HP) and with a displacement of <10 liters per cylinder in g/KW-hr (g/HP-hr) | | | | |
|---|---|---|---|---|---|
| | NMHC + $NO_X$ | HC | $NO_X$ | CO | PM |
| KW<8 (HP<11) | 10.5 (7.8) | | | 8.0 (6.0) | 1.0 (0.75) |
| 8≤KW<19 (11≤HP<25) | 9.5 (7.1) | | | 6.6 (4.9) | 0.80 (0.60) |
| 19≤KW<37 (25≤HP<50) | 9.5 (7.1) | | | 5.5 (4.1) | 0.80 (0.60) |
| 37≤KW<56 (50≤HP<75) | | | 9.2 (6.9) | | |
| 56≤KW<75 (75≤HP<100) | | | 9.2 (6.9) | | |
| 75≤KW<130 (100≤HP<175) | | | 9.2 (6.9) | | |
| 130≤KW<225 (175≤HP<300) | | 1.3 (1.0) | 9.2 (6.9) | 11.4 (8.5) | 0.54 (0.40) |
| 225≤KW<450 (300≤HP<600) | | 1.3 (1.0) | 9.2 (6.9) | 11.4 (8.5) | 0.54 (0.40) |
| 450≤KW≤560 (600≤HP≤750) | | 1.3 (1.0) | 9.2 (6.9) | 11.4 (8.5) | 0.54 (0.40) |
| KW>560 (HP>750) | | 1.3 (1.0) | 9.2 (6.9) | 11.4 (8.5) | 0.54 (0.40) |

**Table 2 to Subpart IIII of Part 60—Emission Standards for 2008 Model Year and Later Emergency Stationary CI ICE <37 KW (50 HP) With a Displacement of <10 Liters per Cylinder**

[As stated in §60.4202(a)(1), you must comply with the following emission standards]

| Engine power | Emission standards for 2008 model year and later emergency stationary CI ICE <37 KW (50 HP) with a displacement of <10 liters per cylinder in g/KW-hr (g/HP-hr) | | | |
|---|---|---|---|---|
| | Model year(s) | $NO_X$+ NMHC | CO | PM |
| KW<8 (HP<11) | 2008+ | 7.5 (5.6) | 8.0 (6.0) | 0.40 (0.30) |

| Engine power | Emission standards for 2008 model year and later emergency stationary CI ICE <37 KW (50 HP) with a displacement of <10 liters per cylinder in g/KW-hr (g/HP-hr) | | | |
|---|---|---|---|---|
| | Model year(s) | $NO_X$+ NMHC | CO | PM |
| 8≤KW<19 (11≤HP<25) | 2008+ | 7.5 (5.6) | 6.6 (4.9) | 0.40 (0.30) |
| 19≤KW<37 (25≤HP<50) | 2008+ | 7.5 (5.6) | 5.5 (4.1) | 0.30 (0.22) |

**Table 3 to Subpart IIII of Part 60—Certification Requirements for Stationary Fire Pump Engines**

[As stated in §60.4202(d), you must certify new stationary fire pump engines beginning with the following model years:]

| Engine power | Starting model year engine manufacturers must certify new stationary fire pump engines according to §60.4202(d) |
|---|---|
| KW<75 (HP<100) | 2011 |
| 75≤KW<130 (100≤HP<175) | 2010 |
| 130≤KW≤560 (175≤HP≤750) | 2009 |
| KW>560 (HP>750) | 2008 |

**Table 4 to Subpart IIII of Part 60—Emission Standards for Stationary Fire Pump Engines**

[As stated in §§60.4202(d) and 60.4205(c), you must comply with the following emission standards for stationary fire pump engines]

| Maximum engine power | Model year(s) | NMHC + $NO_X$ | CO | PM |
|---|---|---|---|---|
| KW<8 (HP<11) | 2010 and earlier | 10.5 (7.8) | 8.0 (6.0) | 1.0 (0.75) |
| | 2011+ | 7.5 (5.6) | | 0.40 (0.30) |
| 8≤KW<19 (11≤HP<25) | 2010 and earlier | 9.5 (7.1) | 6.6 (4.9) | 0.80 (0.60) |
| | 2011+ | 7.5 (5.6) | | 0.40 (0.30) |
| 19≤KW<37 (25≤HP<50) | 2010 and earlier | 9.5 (7.1) | 5.5 (4.1) | 0.80 (0.60) |
| | 2011+ | 7.5 (5.6) | | 0.30 (0.22) |
| 37≤KW<56 (50≤HP<75) | 2010 and earlier | 10.5 (7.8) | 5.0 (3.7) | 0.80 (0.60) |
| | 2011+[1] | 4.7 (3.5) | | 0.40 (0.30) |
| 56≤KW<75 (75≤HP<100) | 2010 and earlier | 10.5 (7.8) | 5.0 (3.7) | 0.80 (0.60) |

| Maximum engine power | Model year(s) | NMHC + $NO_X$ | CO | PM |
|---|---|---|---|---|
| | 2011+[1] | 4.7 (3.5) | | 0.40 (0.30) |
| 75≤KW<130 (100≤HP<175) | 2009 and earlier | 10.5 (7.8) | 5.0 (3.7) | 0.80 (0.60) |
| | 2010+[2] | 4.0 (3.0) | | 0.30 (0.22) |
| 130≤KW<225 (175≤HP<300) | 2008 and earlier | 10.5 (7.8) | 3.5 (2.6) | 0.54 (0.40) |
| | 2009+[3] | 4.0 (3.0) | | 0.20 (0.15) |
| 225≤KW<450 (300≤HP<600) | 2008 and earlier | 10.5 (7.8) | 3.5 (2.6) | 0.54 (0.40) |
| | 2009+[3] | 4.0 (3.0) | | 0.20 (0.15) |
| 450≤KW≤560 (600≤HP≤750) | 2008 and earlier | 10.5 (7.8) | 3.5 (2.6) | 0.54 (0.40) |
| | 2009+ | 4.0 (3.0) | | 0.20 (0.15) |
| KW>560 (HP>750) | 2007 and earlier | 10.5 (7.8) | 3.5 (2.6) | 0.54 (0.40) |
| | 2008+ | 6.4 (4.8) | | 0.20 (0.15) |

[1]For model years 2011–2013, manufacturers, owners and operators of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 revolutions per minute (rpm) may comply with the emission limitations for 2010 model year engines.
[2]For model years 2010–2012, manufacturers, owners and operators of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 rpm may comply with the emission limitations for 2009 model year engines.
[3]In model years 2009–2011, manufacturers of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 rpm may comply with the emission limitations for 2008 model year engines.

**Table 5 to Subpart IIII of Part 60—Labeling and Recordkeeping Requirements for New Stationary Emergency Engines**

[You must comply with the labeling requirements in §60.4210(f) and the recordkeeping requirements in §60.4214(b) for new emergency stationary CI ICE beginning in the following model years:]

| Engine power | Starting model year |
|---|---|
| 19≤KW<56 (25≤HP<75) | 2013 |
| 56≤KW<130 (75≤HP<175) | 2012 |
| KW≥130 (HP≥175) | 2011 |

**Table 6 to Subpart IIII of Part 60—Optional 3-Mode Test Cycle for Stationary Fire Pump Engines**

[As stated in §60.4210(g), manufacturers of fire pump engines may use the following test cycle for testing fire pump engines:]

| Mode No. | Engine speed[1] | Torque (percent)[2] | Weighting factors |
|---|---|---|---|
| 1 | Rated | 100 | 0.30 |
| 2 | Rated | 75 | 0.50 |
| 3 | Rated | 50 | 0.20 |

[1]Engine speed: ±2 percent of point.
[2]Torque: NFPA certified nameplate HP for 100 percent point. All points should be ±2 percent of engine percent load value.

**Table 7 to Subpart IIII of Part 60—Requirements for Performance Tests for Stationary CI ICE With a Displacement of ≥30 Liters per Cylinder**

[As stated in §60.4213, you must comply with the following requirements for performance tests for stationary CI ICE with a displacement of ≥30 liters per cylinder:]

| For each | Complying with the requirement to | You must | Using | According to the following requirements |
|---|---|---|---|---|
| 1. Stationary CI internal combustion engine with a displacement of ≥30 liters per cylinder | a. Reduce $NO_X$emissions by 90 percent or more | i. Select the sampling port location and the number of traverse points; | (1) Method 1 or 1A of 40 CFR part 60, appendix A | (a) Sampling sites must be located at the inlet and outlet of the control device. |
| | | ii. Measure $O_2$at the inlet and outlet of the control device; | (2) Method 3, 3A, or 3B of 40 CFR part 60, appendix A | (b) Measurements to determine $O_2$concentration must be made at the same time as the measurements for $NO_X$concentration. |
| | | iii. If necessary, measure moisture content at the inlet and outlet of the control device; and, | (3) Method 4 of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03 (incorporated by reference, see §60.17) | (c) Measurements to determine moisture content must be made at the same time as the measurements for $NO_X$concentration. |

| For each | Complying with the requirement to | You must | Using | According to the following requirements |
|---|---|---|---|---|
| | | iv. Measure $NO_X$at the inlet and outlet of the control device | (4) Method 7E of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03 (incorporated by reference, see §60.17) | (d) $NO_X$concentration must be at 15 percent $O_2$, dry basis. Results of this test consist of the average of the three 1-hour or longer runs. |
| | b. Limit the concentration of $NO_X$in the stationary CI internal combustion engine exhaust. | i. Select the sampling port location and the number of traverse points; | (1) Method 1 or 1A of 40 CFR part 60, appendix A | (a) If using a control device, the sampling site must be located at the outlet of the control device. |
| | | ii. Determine the $O_2$concentration of the stationary internal combustion engine exhaust at the sampling port location; and, | (2) Method 3, 3A, or 3B of 40 CFR part 60, appendix A | (b) Measurements to determine $O_2$concentration must be made at the same time as the measurement for $NO_X$concentration. |
| | | iii. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and, | (3) Method 4 of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03 (incorporated by reference, see §60.17) | (c) Measurements to determine moisture content must be made at the same time as the measurement for $NO_X$concentration. |
| | | iv. Measure $NO_X$at the exhaust of the stationary internal combustion engine | (4) Method 7E of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03 (incorporated by reference, see §60.17) | (d) $NO_X$concentration must be at 15 percent $O_2$, dry basis. Results of this test consist of the average of the three 1-hour or longer runs. |
| | c. Reduce PM emissions by 60 percent or more | i. Select the sampling port location and the number of traverse points; | (1) Method 1 or 1A of 40 CFR part 60, appendix A | (a) Sampling sites must be located at the inlet and outlet of the control device. |

| For each | Complying with the requirement to | You must | Using | According to the following requirements |
|---|---|---|---|---|
| | | ii. Measure $O_2$at the inlet and outlet of the control device; | (2) Method 3, 3A, or 3B of 40 CFR part 60, appendix A | (b) Measurements to determine $O_2$concentration must be made at the same time as the measurements for PM concentration. |
| | | iii. If necessary, measure moisture content at the inlet and outlet of the control device; and | (3) Method 4 of 40 CFR part 60, appendix A | (c) Measurements to determine and moisture content must be made at the same time as the measurements for PM concentration. |
| | | iv. Measure PM at the inlet and outlet of the control device | (4) Method 5 of 40 CFR part 60, appendix A | (d) PM concentration must be at 15 percent $O_2$, dry basis. Results of this test consist of the average of the three 1-hour or longer runs. |
| | d. Limit the concentration of PM in the stationary CI internal combustion engine exhaust | i. Select the sampling port location and the number of traverse points; | (1) Method 1 or 1A of 40 CFR part 60, appendix A | (a) If using a control device, the sampling site must be located at the outlet of the control device. |
| | | ii. Determine the $O_2$concentration of the stationary internal combustion engine exhaust at the sampling port location; and | (2) Method 3, 3A, or 3B of 40 CFR part 60, appendix A | (b) Measurements to determine $O_2$concentration must be made at the same time as the measurements for PM concentration. |
| | | iii. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and | (3) Method 4 of 40 CFR part 60, appendix A | (c) Measurements to determine moisture content must be made at the same time as the measurements for PM concentration. |
| | | iv. Measure PM at the exhaust of the stationary internal combustion engine | (4) Method 5 of 40 CFR part 60, appendix A | (d) PM concentration must be at 15 percent $O_2$, dry basis. Results of this test consist of the average of the three 1-hour or longer runs. |

**Table 8 to Subpart IIII of Part 60—Applicability of General Provisions to Subpart IIII**

[As stated in §60.4218, you must comply with the following applicable General Provisions:]

| General Provisions citation | Subject of citation | Applies to subpart | Explanation |
|---|---|---|---|
| §60.1 | General applicability of the General Provisions | Yes | |
| §60.2 | Definitions | Yes | Additional terms defined in §60.4219. |
| §60.3 | Units and abbreviations | Yes | |
| §60.4 | Address | Yes | |
| §60.5 | Determination of construction or modification | Yes | |
| §60.6 | Review of plans | Yes | |
| §60.7 | Notification and Recordkeeping | Yes | Except that §60.7 only applies as specified in §60.4214(a). |
| §60.8 | Performance tests | Yes | Except that §60.8 only applies to stationary CI ICE with a displacement of (≥30 liters per cylinder and engines that are not certified. |
| §60.9 | Availability of information | Yes | |
| §60.10 | State Authority | Yes | |
| §60.11 | Compliance with standards and maintenance requirements | No | Requirements are specified in subpart IIII. |
| §60.12 | Circumvention | Yes | |
| §60.13 | Monitoring requirements | Yes | Except that §60.13 only applies to stationary CI ICE with a displacement of (≥30 liters per cylinder. |
| §60.14 | Modification | Yes | |
| §60.15 | Reconstruction | Yes | |
| §60.16 | Priority list | Yes | |
| §60.17 | Incorporations by reference | Yes | |
| §60.18 | General control device requirements | No | |

| General Provisions citation | Subject of citation | Applies to subpart | Explanation |
|---|---|---|---|
| §60.19 | General notification and reporting requirements | Yes | |

# Indiana Department of Environmental Management
# Office of Air Quality

## Technical Support Document (TSD) for a Part 70 Minor Source Modification and Significant Permit Modification

### Source Description and Location

| | |
|---|---|
| Source Name: | J. L. Smith Services DBA American Crushing & Recycling |
| Source Location: | One North Broadway, Gary, Indiana 46402 |
| Mailing Address: | 2484 Lindair Drive, Springfield, Ohio 45502 |
| County: | Lake |
| SIC Code: | 1429 |
| Operation Permit No.: | T 089-23525-00509 |
| Operation Permit Issuance Date: | December 15, 2006 |
| Significant Source Modification No.: | 089-28324-00509 |
| Significant Permit Modification No.: | 089-28415-00509 |
| Permit Reviewer: | Jenny Acker |

### Source Definition

This steel mill consists of a source with on-site contractors:

(a) U.S. Steel Gary Works, the primary operation, is located at One North Broadway, Gary Indiana, and

(b) J.L. Smith Services DBA American Crushing & Recycling, the supporting operation, is located at One North Broadway, Gary, Indiana.

IDEM has determined that U.S. Steel Gary Works and J.L. Smith Services DBA American Crushing & Recycling are under the common control of U.S. Steel Gary Works, and therefore, will be considered as one source, as defined by 326 IAC 2-7-1(22), based on this contractual control.

### Existing Approvals

The source was issued Part 70 Operating Permit No. 089-23525-00509 on December 15, 2006. The source has since received the following approval:

(a) Review Request No. 089-28192-00509, issued on July 9, 2009.

## County Attainment Status

The source is located in Lake County.

| Pollutant | Designation |
|---|---|
| $SO_2$ | Better than national standards. |
| CO | Attainment effective February 18, 2000, for the part of the city of East Chicago bounded by Columbus Drive on the north; the Indiana Harbor Canal on the west; 148th Street, if extended, on the south; and Euclid Avenue on the east. Unclassifiable or attainment effective November 15, 1990, for the remainder of East Chicago and Lake County.. |
| $O_3$ | Nonattainment Subpart 2 Moderate effective June 15, 2004, for the 8-hour ozone standard.[1] |
| $PM_{10}$ | Attainment effective March 11, 2003, for the cities of East Chicago, Hammond, Whiting, and Gary. Unclassifiable effective November 15, 1990, for the remainder of Lake County. |
| $NO_2$ | Cannot be classified or better than national standards. |
| Pb | Not designated. |
| [1]Nonattainment Severe 17 effective November 15, 1990, for the Chicago-Gary-Lake County area for the 1-hour ozone standard which was revoked effective June 15, 2005.<br>Basic nonattainment designation effective federally April 5, 2005, for PM2.5 | |

(a) Ozone Standards

(1) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 revoking the one-hour ozone standard in Indiana.

(2) On September 6, 2007, the Indiana Air Pollution Control Board finalized a temporary emergency rule to re-designate Allen, Clark, Elkhart, Floyd, LaPorte, and St. Joseph counties as attainment for the 8-hour ozone standard.

(3) On November 9, 2007, the Indiana Air Pollution Control Board finalized a temporary emergency rule to re-designate Boone, Hamilton, Hancock, Hendricks, Johnson, Madison, Marion, Morgan, and Shelby counties as attainment for the 8-hour ozone standard.

(4) 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.

(i) 1-hour ozone standard

On December 22, 2006 the United States Court of Appeals, District of Columbia issued a decision which served to partially vacate and remand the U.S. EPA's final rule for implementation of the eight-hour National Ambient Air quality Standard for ozone. *South Coast Air Quality Mgmt. Dist. v. EPA*, 472 F.3d 882 (D.C. Cir., December 22, 2006), *rehearing denied* 2007 U.S. App. LEXIS 13748 (D.C. Cir., June 8, 2007). The U.S. EPA has instructed IDEM to issue permits in accordance with its interpretation of the *South Coast* decision as follows: Gary-Lake-Porter County was previously designated as a severe non-attainment area prior to revocation of the one-hour ozone standard, therefore, pursuant to the anti-backsliding provisions of the Clean Air Act, any new or existing source must be subject to the major source applicability cut-offs and offset ratios under the area's previous one-hour standard designation. This means that a source must achieve the Lowest Achievable Emission Rate (LAER) if it exceeds 25 tons per year of VOC emissions and must

offset any increase in VOC emissions by a decrease of 1.3 times that amount.

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. Therefore, VOC emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3. See the State Rule Applicability for the source section.

(ii) 8-hour ozone standard

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.

(b) PM2.5
U.S. EPA, in the Federal Register Notice 70 FR 943 dated January 5, 2005, has designated Lake County as nonattainment for PM2.5. On March 7, 2005 the Indiana Attorney General's Office, on behalf of IDEM, filed a lawsuit with the Court of Appeals for the District of Columbia Circuit challenging U.S. EPA's designation of nonattainment areas without sufficient data. However, in order to ensure that sources are not potentially liable for a violation of the Clean Air Act, the OAQ is following the U.S. EPA's New Source Review Rule for PM2.5 promulgated on May 8, 2008, and effective on July 15, 2008. Therefore, direct PM2.5 and SO2 emissions were reviewed pursuant to the requirements of Nonattainment New Source Review, 326 IAC 2-1.1-5. See the State Rule Applicability – Entire Source section.

(c) Other Criteria Pollutants
Lake County has been classified as attainment or unclassifiable in Indiana for $SO_2$, CO, Ozone, $PM_{10}$, NOX, and Lead. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(d) Since this source is classified as a steel mill plant, it is considered one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1).

(e) Fugitive Emissions
Since this type of operation is in one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3, fugitive emissions are counted toward the determination of PSD and Emission Offset applicability.

## Source Status

The table below summarizes the potential to emit of the entire source (U.S. Steel Gary Works and all on-site contractors), prior to the proposed modification, after consideration of all enforceable limits established in the effective permits:

| **Pollutant** | **Emissions** (ton/yr) |
|---|---|
| PM | Greater than 100 |
| $PM_{10}$ | Greater than 100 |
| $PM_{2.5}$ | Greater than 100 |
| $SO_2$ | Greater than 100 |
| VOC | Greater than 100 |
| CO | Greater than 100 |
| $NO_X$ | Greater than 100 |

(a) This existing source is a major stationary source, under PSD (326 IAC 2-2), because a regulated pollutant is emitted at a rate of 100 tons per year or more, and it is one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1).

(b) This existing source is a major stationary source, under Emission Offset (326 IAC 2-3), because Volatile Organic Compounds (VOC), a nonattainment regulated pollutant, is emitted at a rate of 100 tons per year or more.

(c) This existing source is a major stationary source, under nonattainment new source review rules (326 IAC 2-1.1-5) since direct PM2.5 and $SO_2$ are emitted at a rate of 100 tons per year or more.

(d) These emissions are based upon the Technical Support Document to Part 70 Operating Permit No. 089-7663-00121.

The table below summarizes the potential to emit HAPs for the entire source, prior to the proposed modification, after consideration of all enforceable limits established in the effective permits:

| **HAPs** | **Potential To Emit** (ton/yr) |
|---|---|
| Single HAP | Greater Than 10 |
| Total HAPs | Greater Than 25 |

This existing source is a major source of HAPs, as defined in 40 CFR 63.2, because HAP emissions are greater than ten (10) tons per year for a single HAP and greater than twenty-five (25) tons per year for a combination of HAPs. Therefore, this source is a major source under Section 112 of the Clean Air Act (CAA).

These emissions are based upon the Technical Support Document to Part 70 Operating Permit No. 089-7663-00121.

## Description of Proposed Modification

The Office of Air Quality (OAQ) has reviewed a modification application, submitted by J. L. Smith Services DBA American Crushing & Recycling (J. L. Smith) on August 7, 2009, relating to modifications to the existing stationary crushing and screening plant. The following is a list of the proposed emission units:

(a) One (1) screening operation, approved for construction in 2009, with a maximum capacity of 125 tons of steel slag per hour, consisting of the following:

(1) One (1) feed hopper, identified as FH-1, receiving material via stacker conveyor SC-1 or truck, equipped with a metering wheel to discharge material. Note: There are no transfer points associated with FH-1.

(2) One (1) conveyor, identified as T-1, transferring material from feed hopper FH-1 to screener SC-1, consisting of one (1) transfer point.

(3) One (1) screener, identified as SR-1, with a maximum of three (3) screen decks.

(4) Four (4) conveyors, identified as T2, T3, T4, and T5, approved for construction in 2009, each used in conjunction with screener SR-1, and each consisting of one (1) transfer point.

(b) One (1) stacker conveyor, identified as SC-1, approved for construction in 2009, with a conveying capacity of 125 tons of steel slag per hour, utilized for transporting slag from the crusher (CR-1) to the feed hopper (FH-1).

(c) One (1) stacker conveyor, identified as SC-2, approved for construction in 2009, with a conveying capacity of 125 tons of steel slag per hour, consisting of one (1) transfer point, utilized for transporting material from the screener SR-1 to a stockpile.

(d) One (1) diesel fired engine, identified as G-1, approved for installation in 2009, used to power crusher CR-1, with a maximum rated output of 300 hp-hr.

(e) One (1) diesel fired engine, identified as G-3, approved for installation in 2009, used to power stacker conveyor SC-2, with a maximum rated output of 85 hp-hr.

Aggregated Projects - Part 70 Operating Permit No. T089-23525-00509, and Significant Source Modification No. T089-28324-00509 and Significant Permit Modification No.089-28415-00509:
J.L. Smith Services DBA American Crushing & Recycling was issued a Part 70 Operating Permit (T089-23525-00509) on December 15, 2006 for the installation and operation of a stationary crushing and screening plant at U.S. Steel - Gary Works. The stationary crushing and screening plant was not installed or operated in accordance with the provisions of the Part 70 permit. This permitting action, Significant Source Modification No. 089-28324-00509 and Significant Permit Modification No. 089-28415-00509, is intended to properly permit the operation as it exists and is being operated, and thus, the emissions are considered to be aggregated with the emissions from the Part 70 permitting action.

## Enforcement Issues

IDEM is aware that equipment has been constructed and operated prior to receipt of the proper permit. IDEM is reviewing this matter and will take the appropriate action. This proposed approval is intended to satisfy the requirements of the construction permit rules.

## Emission Calculations

See Appendix A of this Technical Support Document for detailed emission calculations.

## Permit Level Determination – Part 70

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emission unit to emit any air pollutant under its physical and operational

design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, IDEM, or the appropriate local air pollution control agency."

The following table is used to determine the appropriate permit level under 326 IAC 2-7-10.5. This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

| **PTE Before Controls of the Modification** | |
|---|---|
| **Pollutant** | **Potential To Emit** (ton/yr) |
| PM | 216.29 |
| $PM_{10}$ | 59.76 |
| $PM_{2.5}$ | 54.55 |
| $SO_2$ | 3.42 |
| VOC | 4.25 |
| CO | 11.20 |
| $NO_X$ | 52.04 |

This source modification is subject to 326 IAC 2-7-10.5(f)(4) for modifications with a potential to emit greater than or equal to twenty-five (25) tons per year of the following pollutants: particulate matter (PM) or particulate matter with an aerodynamic diameter less than or equal to ten (10) micrometers ($PM_{10}$) and nitrogen oxides ($NO_X$).

Additionally, the modification will be incorporated into the Part 70 Operating Permit through a significant permit modification issued pursuant to 326 IAC 2-7-12(d), because the modification requires significant changes in existing monitoring Part 70 permit terms and conditions.

## Permit Level Determination – PSD, Emission Offset, and Nonattainment NSR

The table below summarizes the potential to emit, reflecting all limits, of the emission units. Any control equipment is considered federally enforceable only after issuance of this Part 70 permit modification, and only to the extent that the effect of the control equipment is made practically enforceable in the permit. The following table includes all sources at the plant.

| Emission Unit | PM | PM10 | PM2.5 | $SO_2$ | $NO_x$ | VOC | CO |
|---|---|---|---|---|---|---|---|
| Truck Unloading | 0.95 | 0.46 | 0.34 | -- | -- | -- | -- |
| Screening Operation | | | | | | | |
| Conveyor T-1 Transfer Point | 0.32 | 0.12 | 0.12 | -- | -- | -- | -- |
| Screening - 1st screen | 2.69 | 0.94 | 0.94 | -- | -- | -- | -- |
| Screening - 2nd screen | 2.69 | 0.94 | 0.94 | -- | -- | -- | -- |
| Screening - fines screening | 9.68 | 2.32 | 2.32 | -- | -- | -- | -- |
| Conveyors T2 - T5 Transfer Points | 1.17 | 0.55 | 0.08 | -- | -- | -- | -- |
| Tertiary Crushing | 0.58 | 0.26 | 0.26 | -- | -- | -- | -- |
| Portable Stacker Conveyor (SC-1) | 0.32 | 0.12 | 0.12 | -- | -- | -- | -- |
| Portable Stacker Conveyor (SC-2) | 1.17 | 0.55 | 0.08 | -- | -- | -- | -- |
| Material Handling & Storage Piles | 1.17 | 0.55 | 0.08 | -- | -- | -- | -- |

| Emission Unit | PM | PM10 | PM2.5 | $SO_2$ | $NO_x$ | VOC | CO |
|---|---|---|---|---|---|---|---|
| Diesel Generators | 2.76 | 2.76 | 2.76 | 2.58 | 39.26 | 4.69 | 8.45 |
| Roads | 1.30 | 0.35 | 0.03 | -- | -- | -- | -- |
| **Total for Source** | **24.67** | **9.89** | **8.08** | **2.58** | **39.26** | **4.69** | **8.45** |
| **PSD Significant Level** | **25** | **15** | **n/a** | **40** | **40** | **n/a** | **100** |
| **Emission Offset Significant Threshold** | **n/a** | **n/a** | **n/a** | **n/a** | **40** | **25** | **n/a** |
| **Nonattainment NSR Significant Threshold** | **n/a** | **n/a** | **10** | **n/a** | **n/a** | **n/a** | **n/a** |

This modification to an existing major stationary source is not major because the emissions increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

This modification to an existing major stationary source is not major because the emissions increase is less than the Emission Offset and Nonattainment NSR significant levels. Therefore, pursuant to 326 IAC 2-3 and 326 IAC 2-1.1-5, the Emission Offset and Nonattainment NSR requirements do not apply.

Since this source is considered a major PSD and Nonattainment NSR source and the unrestricted potential to emit of this modification is greater than twenty-five (25) tons of PM per year, fifteen (15) tons of $PM_{10}$ per year, ten (10) tons of $PM_{2.5}$ per year and forty (40) tons of $NO_x$ per year of this source has elected to limit the potential to emit of this modification as follows:

(a) The total amount of slag processed shall not exceed four hundred thirty thousand (430,000) tons of material per twelve (12) consecutive month period with compliance determined at the end of each month.

(b) The moisture content of the slag processed shall not be less than two percent (2.0%).

(c) The amount of sand processed through the final screen deck (fines screening) of SR-1 shall not exceed one hundred twenty-nine (129,000) tons per twelve (12) consecutive month period with compliance determined at the end of each month.

(d) The total amount of diesel fuel consumed by the three (3) generators (G-1, G-2, and G-3) shall be less than one hundred thirty thousand (130,000) gallons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with these limitations will ensure that the potential to emit from this source is less than twenty-five (25) tons of PM per year, less than fifteen (15) tons of $PM_{10}$ per year, less than ten (10) tons of $PM_{2.5}$ per year, and less than forty (40) tons of $NO_x$ per year. Therefore, the requirements of 326 IAC 2-2 (PSD) and 326 IAC 2-1.1-5 (Nonattainment NSR) are rendered not applicable.

## Federal Rule Applicability Determination

The following federal rules are applicable to the source due to this modification:

**NSPS:**

(a) 40 CFR 60, Subpart IIII
The diesel fired engines (G-1, G-2, and G-3) are subject to the requirements of the Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (40 CFR 60, Subpart IIII) due to the model year of installation.

The diesel fired engines (G-1, G-2, and G-3) are subject to the following portions of 40 CFR 60, Subpart IIII.

(1) 40 CFR 60.4200 (a)(1)(i), (a)(2), and (a)(3)
(2) 40 CFR 60.4200(c)
(3) 40 CFR 60.4200(d)
(4) 40 CFR 60.4204 (a) and (b)
(5) 40 CFR 60.4205 (a) and (b)
(6) 40 CFR 60.4206
(7) 40 CFR 60.4207 (a), (b), and (c)
(8) 40 CFR 60.4208 (a), (b), (c), (d), (e), (g), (h)
(9) 40 CFR 60.4209
(10) 40 CFR 60.4211 (a), (b), and (c)
(11) 40 CFR 60.4212
(12) 40 CFR 60.4213
(13) 40 CFR 60.4214 (a) and (c)
(14) 40 CFR 60.4218
(15) 40 CFR 60.4219

Table 1 to Subpart IIII of Part 60
Table 2 to Subpart IIII of Part 60
Table 3 to Subpart IIII of Part 60
Table 4 to Subpart IIII of Part 60
Table 5 to Subpart IIII of Part 60
Table 8 to Subpart IIII of Part 60

The provisions of 40 CFR 60 Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1, apply to the facility described in this section except when otherwise specified in 40 CFR 60, Subpart IIII.

(b) The requirements of New Source Performance Standard, 40 CFR 60.670 through 60.676, Subpart OOO - Standards of Performance for Nonmetallic Mineral Processing Plants are not applicable to this modification because the capacity of this stationary crushing and screening plant is less than 150 tons per hour. [40 CFR 60.670(c)(2)]

(c) The requirements of New Source Performance Standard 326 IAC 12, 40 CFR 60.380 through 60.686, Subpart LL - Standards of Performance for Metallic Mineral Processing Plants (326 IAC 12) are not applicable to this modification since the operations are not producing metallic mineral concentrates from ore. The slag crushing and/or screening operations are not performed in a mine or pit.

**NESHAP:**

(d) 40 CFR 63, Subpart ZZZZ
The emergency fire pump, Y-pit Pump1 and Y-pit Pump2 engines are compression ingition (CI) stationary RICE with a site rating of less than or equal to 500 brake HP. Therefore, pursuant to 63.6590(c), Y-pit Pump1 and Y-pit Pump2 engines shall meet the requirements

of the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE) (326 IAC 20 and 40 CFR Part 63, Subpart ZZZZ) by complying with the requirements of 40 CFR 60, Subpart IIII. No further requirements apply for these engines under 40 CFR 63, Subpart ZZZZ.

**CAM:**

(e) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to each new or modified pollutant-specific emission unit that meets the following criteria:

(1) has a potential to emit before controls equal to or greater than the Part 70 major source threshold for the pollutant involved;

(2) is subject to an emission limitation or standard for that pollutant; and

(3) uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.

Since none of the emission units use a control device, based on this evaluation, the requirements of 40 CFR Part 64, CAM are not applicable to any of the new or modified units as part of this modification.

## State Rule Applicability Determination

**326 IAC 2-1.1-5 (Nonattainment New Source Review)**
Nonattainment New Source Review applicability is discussed under the Permit Level Determination – PSD and Emission Offset section.

**326 IAC 2-2 and 2-3 (PSD and Emission Offset)**
PSD and Emission Offset applicability is discussed under the Permit Level Determination – PSD and Emission Offset section.

**326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))**
The operation of this crushing and screening plant will emit less than ten (10) tons per year for a single HAP and less than twenty-five (25) tons per year for a combination of HAPs. Therefore, the requirements of 326 IAC 2-4.1 do not apply to this modification.

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

(a) Opacity shall not exceed an average of 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.

**326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)**
Pursuant to 326 IAC 6-3-1(c)(3), the requirement of 326 IAC 6-3 shall not apply to if a particulate emission limitation is established in 326 IAC 6.8. Since particulate emissions limitations have been established in 326 IAC 6.8, the requirements of 326 IAC 6-3 shall not apply.

**326 IAC 6-4-2 (Fugitive Dust Emissions), 326 IAC 6.8-10-3 (Lake County Fugitive Particulate Matter Emissions)**

(a) Pursuant to 326 IAC 6-4-2:

(1) The screening, and conveying, generating fugitive dust shall be in violation of this rule (326 IAC 6-4) if any of the following criteria are violated:

(A) A source or combination of sources which cause to exist fugitive dust concentrations greater than sixty-seven percent (67%) in excess of ambient upwind concentrations as determined by the following formula:

$$\frac{P = 100\ (R) - U)}{U}$$

Where
P = Percentage increase
R = Number of particles of fugitive dust measured at downward receptor site
U = Number of particles of fugitive dust measured at upwind or site

(B) The fugitive dust is comprised of fifty percent (50%) or more respirable dust, then the percent increase of dust concentration in subdivision (1) of this section shall be modified as follows:

$$PR = (1.5 \pm N)\ P$$

Where
N = Fraction of fugitive dust that is respirable dust;
PR = allowable percentage increase in dust concentration above background; and
P = no value greater than sixty-seven percent (67%).

(C) The ground level ambient air concentrations exceed fifty (50) micrograms per cubic meter above background concentrations for a sixty (60) minute period.

(D) If fugitive dust is visible crossing the boundary or property line of a source. This subdivision may be refuted by factual data expressed in subdivisions (1), (2) or (3) of this section. 326 IAC 6-4-2(4) is not federally enforceable.

(2) Pursuant to 326 IAC 6-4-6(6) (Exceptions), fugitive dust from a source caused by adverse meteorological conditions will be considered an exception to this rule (326 IAC 6-4) and therefore not in violation.

(b) Pursuant to 326 IAC 6.8-10-3 (Lake County Fugitive Particulate Matter Emissions Limitations), fugitive emissions from the screening, and conveying, generating fugitive dust shall comply with the emissions limitations in Section C - Fugitive Dust Emissions.

**326 IAC 6.8-10-3 (Lake County Fugitive Particulate Matter Control Requirements) and 326 IAC 6.8-11 (Particulate Matter Contingency Measures)**

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

(1) The average instantaneous opacity of fugitive particulate emissions from a paved road shall not exceed ten percent (10%).

(2) The average instantaneous opacity of fugitive particulate emissions from an unpaved road shall not exceed ten percent (10%).

(3) The average instantaneous opacity of fugitive particulate emissions from batch transfer shall not exceed ten percent (10%).

(4) 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.

(5) The opacity of fugitive particulate emissions from storage piles shall not exceed ten percent (10%) on a six (6) minute average.

(6) 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.

(7) 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%).

(8) 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.

(9) 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.

(10) The opacity of particulate emissions from dust handling equipment shall not exceed ten percent (10%).

(11) Any facility or operation not specified in 326 IAC 6.8-10-3 shall meet a twenty percent (20%), three (3) minute average opacity standard.

(12) The Permittee shall achieve these limits by controlling fugitive particulate matter emissions according to the Fugitive Dust Control Plan, submitted on July 19, 2006 and attached to the permit as Attachment A.

(b) The source is subject to 326 IAC 6.8-11 (Lake County Particulate Matter Contingency Measures), because it is subject to the requirements of 326 IAC 6.8-10. Pursuant to this rule, the source shall comply with 326 IAC 6.8-11-4 and 326 IAC 6.8-11-6.

**326 IAC 6.8-2 (Lake County: PM10 Emission Requirements)**
J.L. Smith Services DBA American Crushing and Recycling, an on-site contractor of U.S. Steel Gary Works, is not specifically listed under this rule or in 326 IAC 6.8-3 through 326 IAC 6.8-8. Therefore, the provisions of this rule do not apply.

**326 IAC 6.8-1-2 (Particulate Emission Limitations for Lake County)**
This source is subject to the requirements of 326 IAC 6.8-1-2 (Particulate Emission Limitations for Lake County) because the potential emissions from the entire source (including crushing and screening operations) are greater than 100 tons per year.

(a) Pursuant to 326 IAC 6.8-1-2(a) particulate matter emissions the crushing and screening operations shall not exceed 0.03 grains per dry standard cubic foot (dscf).

(b) Pursuant to 326 IAC 6.8-1-2(a) particulate matter emissions from the one (1) diesel engine with a maximum heat input capacity of 1.24 MMBtu per hour, shall not exceed 0.03 grains per dry standard cubic foot (dscf).

Note: The diesel engine is a type of internal combustion engine, in which the fuel is ignited by being suddenly exposed to the high temperature and pressure of the compressed gas. The Permittee uses this engine to power their plant. It is not a steam generator. Therefore, 326 IAC 6.8-1-2(b) is not applicable.

## Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions; however, these provisions do not always fulfill the requirement for a continuous demonstration. When this occurs, IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, Compliance Determination Requirements are included in the permit. The Compliance Determination Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

If the Compliance Determination Requirements are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also in Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

**Compliance Monitoring Requirements**
The compliance monitoring requirements applicable to crushing, screening, and conveying facilities are as follows:

> Visible emission notations of the crushing, screening, and conveying 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. 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. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
>
> 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 with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

These monitoring conditions are necessary to ensure compliance with 326 IAC 6.8-1-2 (Particulate Matter (PM)), 326 IAC 6-4-2 and 326 IAC 6.8-10-3 (Fugitive Dust Emission Limitations), and to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) and 326 IAC 2-1.1-5 (Nonattainment NSR) not applicable to the source.

## Proposed Changes

The changes listed below have been made to Part 70 Operating Permit No. 089-23525-00509. Deleted language appears as ~~strikethroughs~~ and new language appears in **bold**:

**Modification No. 1:**

IDEM has determined that U.S. Steel Gary Works and J.L. Smith Services DBA American Crushing & Recycling are considered to be one source, as defined by 326 IAC 2-7-1(22). U.S. Steel Gary Works, the primary operation, is a stationary source. Therefore, J.L. Smith Services DBA American Crushing & Recycling will is also considered a stationary source. All references to

a "portable source" have been revised to state "stationary source" and the Section C Condition - Relocation of Portable Sources [326 IAC 2-14-4] has been removed from the permit.

**Modification No. 2:**

To minimize future amendments to the issued Part 70 Permits, the OAQ decided to delete the name and/or title of the Responsible Official (RO) in Section A.1, General Information, of the permit. However, OAQ will still be evaluating if a change in RO meets the criteria specified in 326 IAC 2-7-1(34). Additionally, the source status has been updated. The revised permit condition is as follows:

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates a ~~portable~~ **stationary** crushing and screening plant.

| | |
|---|---|
| ~~Responsible Official:~~ | ~~Company President~~ |
| Source Address: | One North Broadway, Gary, Indiana 46402 |
| Mailing Address: | 2484 Lindair Drive, Springfield, Ohio 45502 |
| General Source Phone Number: | (937) 360-5807 |
| SIC Code: | 1429 |
| County Location: | Lake |
| Source Location Status: | Nonattainment for ozone under 8-hour standard<br>Attainment for all other criteria pollutants |
| Source Status: | Part 70 Permit Program<br>~~Minor~~ **Major** Source, under PSD **and Nonattainment New Source Review**<br>Major Source, Section 112 of the Clean Air Act<br>~~Not~~ 1 of 28 Source Categories |

**Modification No. 3:**

The emissions unit descriptions in Section A.3 have been modified to reflect the modifications to existing units, the addition of new emission units, and the removal of units no longer in use.

A.3 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

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

**(a) One (1) screening operation, approved for installation in 2009, with a maximum capacity of 125 tons of steel slag per hour, consisting of the following:**

**(1) One (1) feed hopper, identified as FH-1, receiving material via stacker conveyor SC-1 or truck, equipped with a metering wheel to discharge material. Note: There are no transfer points associated with FH-1.**

**(2) One (1) conveyor, identified as T-1, transferring material from feed hopper FH-1 to screener SC-1, consisting of one (1) transfer point.**

**(3) One (1) screener, identified as SR-1, with a maximum of three (3) screen decks.**

**(4) Four (4) conveyors, identified as T2, T3, T4, and T5, approved for construction in 2009, each used in conjunction with screener SR-1, and each consisting of one (1) transfer point.**

~~(a)~~**(b)** One (1) crusher ~~and screen~~**,** ~~(~~identified as CR-1**,**~~)~~ installed in 2006, with a maximum throughput capacity of 125 tons of steel mill slag per hour, **receiving overburden material from screener SR-1 via conveyor T-2.**

~~(b) One (1) conveyor, consisting of two transfer points (identified as T1 and T2) installed in 2006, with a maximum conveying capacity of 125 tons of steel mill slag per hour.~~

**(c) One (1) stacker conveyor, identified as SC-1, approved for installation in 2009, with a conveying capacity of 125 tons of steel slag per hour, utilized for transporting slag from the crusher (CR-1) to the feed hopper (FH-1).**

**(d) One (1) stacker conveyor, identified as SC-2, approved for installation in 2009, with a conveying capacity of 125 tons of steel slag per hour, consisting of one (1) transfer point, utilized for transporting material from the screener SR-1 to a stockpile.**

**(e) One (1) diesel fired engine, identified as G-1, approved for installation in 2009, used to power crusher CR-1, with a maximum rated output of 300 hp-hr.**

**(f) One (1) diesel fired engine, identified as G-2, approved for installation in 2006, used to power screener SR-1, with a maximum rated output of 125 hp-hr.**

**(g) One (1) diesel fired engine, identified as G-3, approved for installation in 2009, used to power stacker conveyor SC-2, with a maximum rated output of 85 hp-hr.**

~~(c)~~**(h)** Material handling and storage piles.

**Modification No. 4:**

Section A.4 - Insignificant Activities has been deleted since the screening operation will no longer have any insignificant activities.

~~A.4 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]~~

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

~~(A) One (1) diesel engine, installed in 2006, with a maximum heat input capacity of 1.24 MMBtu per hour.~~

**Modification No. 5:**

Several of IDEM's Branches and sections have been renamed. Therefore, IDEM has updated the addresses listed in the permit. References to Permit Administration and Development Section and the Permits Branch have been changed to Permit Administration and Support Section. References to Asbestos Section, Compliance Data Section, Air Compliance Section, and Compliance Branch have been changed to Compliance and Enforcement Branch.

**Modification No. 6:**

The clean unit and pollution control project provisions of the U.S. EPA's New Source Review Reform Rules were vacated on June 24, 2005 by a United States Court of Appeals for the District of Columbia Circuit decision. The OAQ plans to remove the vacated provisions from 326 IAC 2 at the next state rulemaking opportunity. Paragraph (c) of Condition C.15, Record Keeping Requirements, has been revised to remove references to the clean unit and pollution control project provisions. This decision also remanded the “reasonable possibility” standard back to U.S. EPA. On January 22, 2008 U.S. EPA promulgated a rule to address the remand, by the U.S.

Court of Appeals for the District of Columbia on June 25, 2005, of the reasonable possibility provisions of the December 31, 2002 major NSR reform rule. IDEM has agreed, with U.S. EPA, to interpret "reasonable possibility" in 326 IAC 2-2 and 326 IAC 2-3 consistent with the January 22, 2008 U.S. EPA rule. To implement this interpretation, IDEM is revising Section C - General Record Keeping Requirements and Section C - General Reporting Requirements -(Conditions C.15 and C.16).

Conditions C.15 and C.16 have been revised as follows:

~~C.15 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-2] [326 IAC 2-3]~~

~~(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) If there is a reasonable possibility that a "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-3(ll) at an existing emissions unit, other than projects at a Clean Unit, which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(rr) and/or 326 IAC 2-3-3(mm), the Permittee shall comply with following:~~

~~(1) Before beginning actual construction of the "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(ll) at an existing emissions unit, document and maintain the following records:~~

~~(A) A description of the project.~~

~~(B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.~~

~~(C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:~~

~~(i) Baseline actual emissions;~~

~~(ii) Projected actual emissions;~~

~~(iii) Amount of emissions excluded under section 326 IAC 2-2-1(rr)(2)(A)(iii) and/or 326 IAC 2-3-1(mm)(2)(A)(iii); and~~

~~(iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.~~

~~(2) Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any existing emissions unit identified in (1)(B) above; and~~

~~(3) Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity of or the potential to emit that regulated NSR pollutant at the emissions unit.~~

~~C.16 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [326 IAC 2-2] [326 IAC 2-3]~~

~~(a) The Permittee 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 "responsible official" as defined by 326 IAC 2-7-1(34).~~

~~(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 Data Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251~~

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

~~(d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).~~

~~(e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.~~

~~(f) If the Permittee is required to comply with the recordkeeping provisions of (c) in Section C- General Record Keeping Requirements for any "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(ll) at an existing emissions unit, and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ:~~

~~(1) The annual emissions, in tons per year, from the project identified in (c)(1) in Section C- General Record Keeping Requirements exceed the baseline actual emissions, as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(i), by a significant amount, as defined in 326 IAC 2-2-1(xx) and/or 326 IAC 2-3-1(qq), for that regulated NSR pollutant, and~~

~~(2) The emissions differ from the preconstruction projection as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(ii).~~

~~(g) The report for project at an existing emissions unit shall be submitted within sixty (60) days after the end of the year and contain the following:~~

~~(1) The name, address, and telephone number of the major stationary source.~~

~~(2) The annual emissions calculated in accordance with (c)(2) and (3) in Section C- General Record Keeping Requirements.~~

~~(3) The emissions calculated under the actual-to-projected actual test stated in 326 IAC 2-2-2(d)(3) and/or 326 IAC 2-3-2(c)(3).~~

~~(4) Any other information that the Permittee deems fit to include in this report,~~

~~Reports required in this part shall be submitted to:~~

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

~~(h) The Permittee shall make the information required to be documented and maintained in accordance with (c) in Section C- General Record Keeping Requirements available for review upon a request for inspection by IDEM, OAQ. The general public may request this information from the IDEM, OAQ under 326 IAC 17.1.~~

**C.15 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-2][326 IAC 2-3]**

**(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 or ninety (90) days of initial start-up, whichever is later.**

**(c) If there is a reasonable possibility (as defined in 40 CFR 51.165(a)(6)(vi)(A), 40 CFR 51.165(a)(6)(vi)(B), 40 CFR 51.166(r)(6)(vi)(a), and/or 40 CFR 51.166(r)(6)(vi)(b)) that a "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(ll)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(rr) and/or 326 IAC 2-3-1(mm)), the Permittee shall comply with following:**

**(1) Before beginning actual construction of the "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(ll)) at an existing emissions unit, document and maintain the following records:**

**(A) A description of the project.**

**(B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.**

**(C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:**

**(i) Baseline actual emissions;**

**(ii) Projected actual emissions;**

**(iii) Amount of emissions excluded under section 326 IAC 2-2-1(rr)(2)(A)(iii) and/or 326 IAC 2-3-1 (mm)(2)(A)(iii); and**

**(iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.**

**(d) If there is a reasonable possibility (as defined in 40 CFR 51.165(a)(6)(vi)(A) and/or 40 CFR 51.166(r)(6)(vi)(a)) that a "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(ll)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(rr) and/or 326 IAC 2-3-1(mm)), the Permittee shall comply with following:**

**(1) Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any existing emissions unit identified in (1)(B) above; and**

**(2) Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity of or the potential to emit that regulated NSR pollutant at the emissions unit.**

**C.16 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [326 IAC 2-2][326 IAC 2-3]**

**(a) The Permittee 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 "responsible official" as defined by 326 IAC 2-7-1(34).**

**(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 and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251**

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

**(d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).**

**(e) The first report shall cover the period commencing on the date of issuance of this permit or the date of initial start-up, whichever is later, and ending on the last day of the reporting period. Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit, "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.**

**(f) If the Permittee is required to comply with the recordkeeping provisions of (d) in Section C - General Record Keeping Requirements for any "project" (as defined in 326 IAC 2-2-1 (qq) and/or 326 IAC 2-3-1 (ll)) at an existing emissions unit, and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ:**

**(1) The annual emissions, in tons per year, from the project identified in (c)(1) in Section C- General Record Keeping Requirements exceed the baseline actual emissions, as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(i), by a significant amount, as defined in 326 IAC 2-2-1 (xx) and/or 326 IAC 2-3-1 (qq), for that regulated NSR pollutant, and**

**(2) The emissions differ from the preconstruction projection as documented and maintained under Section C - General Record Keeping Requirements (c)(1)(C)(ii).**

**(g) The report for project at an existing emissions unit shall be submitted within sixty (60) days after the end of the year and contain the following:**

**(1) The name, address, and telephone number of the major stationary source.**

**(2) The annual emissions calculated in accordance with (d)(1) and (2) in Section C - General Record Keeping Requirements.**

**(3) The emissions calculated under the actual-to-projected actual test stated in 326 IAC 2-2-2(d)(3) and/or 326 IAC 2-3-2(c)(3).**

**(4) Any other information that the Permittee deems fit to include in this report.**

**Reports required in this part shall be submitted to:**

**Indiana Department of Environmental Management**
**Compliance and Enforcement Branch, Office of Air Quality**
**100 North Senate Avenue**
**MC 61-53 IGCN 1003**
**Indianapolis, Indiana 46204-2251**

**(h) The Permittee shall make the information required to be documented and maintained in accordance with (c) in Section C- General Record Keeping Requirements available for review upon a request for inspection by IDEM, OAQ. The general public may request this information from the IDEM, OAQ under 326 IAC 17.1.**

**Modification No. 7:**

The following modifications have been made to Section D.1

(a) In order to reflect the modifications to existing units, the addition of new emission units, and the removal of units no longer in use, Section D.1 - Facility Description Box has been revised.

(b) Condition D.1.1 - Prevention of Significant Deterioration (PSD) and Nonattainment NSR Minor Limits has been added to the permit to incorporate limitations necessary to render the requirements of PSD and Nonattainment NSR not applicable to the source.

(c) Condition D.1.2 (original Condition D.1.1) - Particulate Matter (PM) has been revised to include the requirements for diesel engines.

(d) Condition D.1.6 (original Condition D.1.5) has been revised to include recordkeeping requirements associated with PSD and Nonattainment NSR limitations.

and

(e) With regards to record keeping requirements for a daily filter inspection log, the intent is that the Permittee makes a record of some sort every day. If an inspection is completed, a "normal" or "abnormal" notation is made. If no inspection is made, a notation is required as to why it wasn't, such as the unit was not operating. In order to attempt to clarify the requirements, the recordkeeping requirements, contained in Section D.1 of the permit, relating the daily parametric monitoring have been revised.

(f) New Condition D.1.7 - Reporting Requirements has been added to the permit.

Section D.1 has been revised as follows:

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

**(a) One (1) screening operation, approved for installation in 2009, with a maximum capacity of 125 tons of steel slag per hour, consisting of the following:**

**(1) One (1) feed hopper, identified as FH-1, receiving material via stacker conveyor SC-1 or truck, equipped with a metering wheel to discharge material. Note: There are no transfer points associated with FH-1.**

**(2) One (1) conveyor, identified as T-1, transferring material from feed hopper FH-1 to screener SC-1, consisting of one (1) transfer point.**

**(3) One (1) screener, identified as SR-1, with a maximum of three (3) screen decks.**

**(4) Four (4) conveyors, identified as T2, T3, T4, and T5, approved for construction in 2009, each used in conjunction with screener SR-1, and each consisting of one (1) transfer point.**

~~(a)~~**(b)** One (1) crusher ~~and screen~~**,** ~~(~~identified as CR-1**,**~~)~~ installed in 2006, with a maximum throughput capacity of 125 tons of steel mill slag per hour, **receiving overburden material from screener SR-1 via conveyor T-2.**

~~(b) One (1) conveyor, consisting of two transfer points (identified as T1 and T2) installed in 2006, with a maximum conveying capacity of 125 tons of steel mill slag per hour.~~

**(c) One (1) stacker conveyor, identified as SC-1, approved for installation in 2009, with a conveying capacity of 125 tons of steel slag per hour, utilized for transporting slag from**

**the crusher (CR-1) to the feed hopper (FH-1).**

**(d) One (1) stacker conveyor, identified as SC-2, approved for installation in 2009, with a conveying capacity of 125 tons of steel slag per hour, consisting of one (1) transfer point, utilized for transporting material from the screener SR-1 to a stockpile.**

**(e) One (1) diesel fired engine, identified as G-1, approved for installation in 2009, used to power crusher CR-1, with a maximum rated output of 300 hp-hr.**

**(f) One (1) diesel fired engine, identified as G-2, approved for installation in 2006, used to power screener SR-1, with a maximum rated output of 125 hp-hr.**

**(g) One (1) diesel fired engine, identified as G-3, approved for installation in 2009, used to power stacker conveyor SC-2, with a maximum rated output of 85 hp-hr.**

~~(c)~~**(h)** Material handling and storage piles.

(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 2-7-5(1)]

**D.1.1 Prevention of Significant Deterioration (PSD) and Nonattainment NSR Minor Limits [326 IAC 2-2] [326 IAC 2-1.1-5]**

**Pursuant to 326 IAC 2-2 (PSD) and 326 IAC 2-1.1-5 (Nonattainment NSR), the following conditions shall apply:**

**(a) The total amount of slag processed shall not exceed four hundred thirty thousand (430,000) tons of material per twelve (12) consecutive month period with compliance determined at the end of each month.**

**(b) The moisture content of the slag processed shall not be less than two percent (2.0%).**

**(c) The amount of sand processed through the final screen deck (fines screening) of SR-1 shall not exceed one hundred twenty-nine (129,000) tons per twelve (12) consecutive month period with compliance determined at the end of each month.**

**(d) The total amount of diesel fuel consumed by the three (3) generators (G-1, G-2, and G-3) shall be less than one hundred thirty thousand (130,000) gallons per twelve (12) consecutive month period, with compliance determined at the end of each month.**

**Compliance with these limitations will ensure that the potential to emit from this source is less than twenty-five (25) tons of PM per year, less than fifteen (15) tons of $PM_{10}$ per year, less than ten (10) tons of $PM_{2.5}$ per year, and less than forty (40) tons of $NO_x$ per year. Therefore, the requirements of 326 IAC 2-2 (PSD) and 326 IAC 2-1.1-5 (Nonattainment NSR) are rendered not applicable.**

~~D.1.1~~**D.1.2** Particulate Matter (PM) [326 IAC 6.8-1-2]

**(a)** Pursuant to 326 IAC 6.8-1-2(a)(Particulate Emission Limitations for Lake County), particulate matter (PM) emissions from the crushing and screening operations shall be limited to 0.03 grains per dry standard cubic foot of exhaust air.

**(b) Pursuant to 326 IAC 6.8-1-2(a) (Particulate Emission Limitations for Lake County), particulate matter (PM) emissions from the one (1) diesel engine shall be limited to**

**0.03 grain per dry standard cubic foot of exhaust air.**

~~D.1.2~~**D.1.3** Fugitive Dust Emission Limitations [326 IAC 6-4-2][326 IAC 6.8-10-3]

* * *

~~D.1.3~~**D.1.4** Preventive Maintenance Plan [326 IAC 2-7-5(13)]

* * *

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

~~D.1.4~~**D.1.5** Visible Emissions Notations

* * *

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-19]

~~D.1.5~~**D.1.6** Record Keeping Requirements

**(a)** **To document compliance with Condition D.1.1(a), the Permittee shall maintain records of the amount of material processed. Records shall be complete and sufficient to demonstrate compliance with Condition D.1.1(a).**

**(b)** **To document compliance with Condition D.1.1(b), the Permittee shall maintain records of the amount of diesel fuel consumed by the three (3) generators (G-1, G-2, and G-3). Records shall be complete and sufficient to demonstrate compliance with Condition D.1.1(b).**

~~(a)~~**(c)** To document compliance with Condition ~~D.1.4~~ **D.1.5**, the Permittee shall maintain records of once per day visible emission notations for the crushing, screening, and conveying operations. **The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).**

~~(b)~~**(d)** All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

**D.1.7 Reporting Requirements**

**A quarterly summary of the information to document compliance with Conditions D.1.1(a) and (b) shall be submitted to the address listed in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or the equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).**

**Modification No. 8:**

Section D.2 contained the requirements for an insignificant activity that has been removed. Therefore, Section D.2 has been deleted in its entirety.

**Modification No. 9:**

Section E.1 has been added to the permit to incorporate the applicable requirements of the Standards of Performance for Stationary Compression Ignition Internal Combustion Engines [40 CFR Part 60, Subpart IIII] [326 IAC 12].

**SECTION E.1 FACILITY OPERATION CONDITIONS**

**Facility Description [326 IAC 2-7-5(15)]:**

**(e) One (1) diesel fired engine, identified as G-1, installed in 2006, used to power crusher CR-1, with a maximum rated output of 300 hp-hr.**

**(f) One (1) diesel fired engine, identified as G-2, approved for installation in 2009, used to screener SR-1, with a maximum rated output of 125 hp-hr.**

**(g) One (1) diesel fired engine, identified as G-3, approved for installation in 2009, used to power stacker conveyor SC-2, with a maximum rated output of 85 hp-hr.**

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

**New Source Performance Standards (NSPS) Requirements [326 IAC 2-7-5(1)]**

**E.1.1 General Provisions Relating to New Source Performance Standards [326 IAC 12-1] [40 CFR Part 60, Subpart A]**

**(a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60 Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1 for the diesel fired engines G-1, G-2, and G-3 except as otherwise specified in 40 CFR Part 60, Subpart IIII.**

**(b) Pursuant to 40 CFR 60.19, the Permittee shall submit all required notifications and reports to:**

**Indiana Department of Environmental Management**
**Compliance and Enforcement Branch, Office of Air Quality**
**100 North Senate Avenue**
**MC 61-53 IGCN 1003**
**Indianapolis, Indiana 46204**

**and**

**Northwest Regional Office**
**8380 Louisiana Street**
**Merrillville, IN 46410**

**E.1.2 Standards of Performance for Stationary Compression Ignition Internal Combustion Engines [40 CFR Part 60, Subpart IIII] [326 IAC 12]**

**Pursuant to 40 CFR Part 60, Subpart IIII, the Permittee shall comply with the provisions of Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, which are incorporated by reference as 326 IAC 12, for the diesel fired engines G-1, G-2, and G-3 as follows:**

**(16) 40 CFR 60.4200 (a)(1)(i), (a)(2), and (a)(3)**
**(17) 40 CFR 60.4200(c)**
**(18) 40 CFR 60.4200(d)**
**(19) 40 CFR 60.4204 (a) and (b)**
**(20) 40 CFR 60.4205 (a) and (b)**
**(21) 40 CFR 60.4206**
**(22) 40 CFR 60.4207 (a), (b), and (c)**
**(23) 40 CFR 60.4208 (a), (b), (c), (d), (e), (g), (h)**
**(24) 40 CFR 60.4209**
**(25) 40 CFR 60.4211 (a), (b), and (c)**
**(26) 40 CFR 60.4212**
**(27) 40 CFR 60.4213**
**(28) 40 CFR 60.4214 (a) and (c)**

**(29) 40 CFR 60.4218**
**(30) 40 CFR 60.4219**

**Table 1 to Subpart IIII of Part 60**
**Table 2 to Subpart IIII of Part 60**
**Table 3 to Subpart IIII of Part 60**
**Table 4 to Subpart IIII of Part 60**
**Table 5 to Subpart IIII of Part 60**
**Table 8 to Subpart IIII of Part 60**

**Modification No. 10:**

The following reporting forms, associated with the limitations in Section D.1, have been added to the permit:

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
## OFFICE OF AIR QUALITY
## COMPLIANCE AND ENFORCEMENT BRANCH

**Part 70 Quarterly Report**

**Source Name:** J. L. Smith Services DBA American Crushing & Recycling
**Source Address:** One North Broadway, Gary, Indiana 46402
**Mailing Address:** 2484 Lindair Drive, Springfield, Ohio 45502
**Part 70 Operating Permit No.:** 089-23525-00509
**Facility:** Source-wide
**Parameter:** Slag processed
**Limit:** 430,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month

**QUARTER:** _____ **YEAR:** _____

| Month | Slag Processed (tons) | Slag Processed (tons) | Slag Processed (tons) |
|---|---|---|---|
| | This Month | Previous 11 Months | 12 Month Total |
| Month 1 | | | |
| Month 2 | | | |
| Month 3 | | | |

**No deviation occurred in this quarter.**

**Deviation/s occurred in this quarter.**
**Deviation has been reported on:** _____

**Submitted by:** _____

**Title / Position:** _____

**Signature:** _____

**Date:** _____

**Phone:** _____

**Attach a signed certification to complete this report.**

*And*

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
## OFFICE OF AIR QUALITY
## COMPLIANCE AND ENFORCEMENT BRANCH

## Part 70 Quarterly Report

**Source Name:** J. L. Smith Services DBA American Crushing & Recycling
**Source Address:** One North Broadway, Gary, Indiana 46402
**Mailing Address:** 2484 Lindair Drive, Springfield, Ohio 45502
**Part 70 Operating Permit No.:** 089-23525-00509
**Facility:** Source-wide
**Parameter:** Sand processed
**Limit:** 129,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month

**QUARTER:** _____ **YEAR:** _____

| Month | Sand Processed (tons) | Sand Processed (tons) | Sand Processed (tons) |
|---|---|---|---|
| | This Month | Previous 11 Months | 12 Month Total |
| Month 1 | | | |
| Month 2 | | | |
| Month 3 | | | |

**No deviation occurred in this quarter.**

**Deviation/s occurred in this quarter.**
**Deviation has been reported on:** _____

**Submitted by:** _____

**Title / Position:** _____

**Signature:** _____

**Date:** _____

**Phone:** _____

**Attach a signed certification to complete this report.**

*And*

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
## OFFICE OF AIR QUALITY
## COMPLIANCE AND ENFORCEMENT BRANCH

**Part 70 Quarterly Report**

**Source Name:** J. L. Smith Services DBA American Crushing & Recycling
**Source Address:** One North Broadway, Gary, Indiana 46402
**Mailing Address:** 2484 Lindair Drive, Springfield, Ohio 45502
**Part 70 Operating Permit No.:** 089-23525-00509
**Facility:** Diesel Generators G-1, G-2, G-3
**Parameter:** Diesel Fuel Consumption, Total
**Limit:** 130,000 gallons per twelve (12) consecutive month period with compliance determined at the end of each month

**QUARTER:** _____ **YEAR:** _____

| Month | Diesel Fuel Consumed (gallons) | Diesel Fuel Consumed (gallons) | Diesel Fuel Consumed (gallons) |
|---|---|---|---|
| | This Month | Previous 11 Months | 12 Month Total |
| Month 1 | | | |
| Month 2 | | | |
| Month 3 | | | |

**No deviation occurred in this quarter.**

**Deviation/s occurred in this quarter.**
**Deviation has been reported on:** _____

**Submitted by:** _____

**Title / Position:** _____

**Signature:** _____

**Date:** _____

**Phone:** _____

**Attach a signed certification to complete this report.**

**Conclusion and Recommendation**

The construction and operation of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Source Modification No. 089-28324-00509 and

Significant Permit Modification No. 089-28415-00509. The staff recommend to the Commissioner that this Part 70 Significant Source and Significant Permit Modification be approved.

**Appendix A: Emission Calculations**
**SUMMARY**

**Company Name:** J.L. Smith Services DBA American Crushing & Recycling
**Address:** One North Broadway, Gary, Indiana 46402
**Significant Source Modification No.:** 089-28324-00509
**Significant Permit Modification No.:** 089-28415-00509
**Reviewer:** Jenny Acker
**Date:** August 17, 2009

**1. Unlimited Potential to Emit (tpy) of New Units**

| Emission Units / Transfer Points | PM | PM10 | PM2.5 | $SO_2$ | $NO_x$ | VOC | CO | HAPs |
|---|---|---|---|---|---|---|---|---|
| Screening Operation | | | | | | | | |
| Conveyor T-1 Transfer Point | 1.64 | 0.60 | 0.60 | -- | -- | -- | -- | -- |
| Screening - 1st Screen | 13.69 | 4.76 | 4.76 | -- | -- | -- | -- | -- |
| Screening - 2nd Screen | 13.69 | 4.76 | 4.76 | -- | -- | -- | -- | -- |
| Fines Screening | 164.25 | 39.42 | 39.42 | -- | -- | -- | -- | -- |
| Conveyors T2 - T5 Transfer Points | 2.98 | 1.41 | 0.21 | -- | -- | -- | -- | -- |
| Portable Stacker Conveyor (SC-1) | 1.64 | 0.60 | 0.60 | -- | -- | -- | -- | -- |
| Portable Stacker Conveyor (SC-2) | 2.98 | 1.41 | 0.21 | -- | -- | -- | -- | -- |
| Diesel Generators G-1 & G-3 | 3.66 | 3.66 | 3.66 | 3.42 | 52.04 | 4.25 | 11.20 | 0.07 |
| Roads | 11.75 | 3.13 | 0.31 | -- | -- | -- | -- | -- |
| **TOTAL** | **216.29** | **59.76** | **54.55** | **3.42** | **52.04** | **4.25** | **11.20** | **0.07** |

**2. Potential to Emit (tpy) of Portable Crushing and Screening Plant after Modification and Limits**

| Emission Units / Transfer Points | PM | PM10 | PM2.5 | $SO_2$ | $NO_x$ | VOC | CO | HAPs |
|---|---|---|---|---|---|---|---|---|
| Truck Unloading | 0.95 | 0.46 | 0.34 | -- | -- | -- | -- | -- |
| Screening Operation | | | | | | | | |
| Conveyor T-1 Transfer Point | 0.32 | 0.12 | 0.12 | -- | -- | -- | -- | -- |
| Screening - 1st Screen | 2.69 | 0.94 | 0.94 | -- | -- | -- | -- | -- |
| Screening - 2nd Screen | 2.69 | 0.94 | 0.94 | -- | -- | -- | -- | -- |
| Fines Screening | 9.68 | 2.32 | 2.32 | -- | -- | -- | -- | -- |
| Conveyors T2 - T5 Transfer Points | 1.17 | 0.55 | 0.08 | -- | -- | -- | -- | -- |
| Tertiary Crushing | 0.58 | 0.26 | 0.26 | -- | -- | -- | -- | -- |
| Portable Stacker Conveyor (SC-1) | 0.32 | 0.12 | 0.12 | -- | -- | -- | -- | -- |
| Portable Stacker Conveyor (SC-2) | 1.17 | 0.55 | 0.08 | -- | -- | -- | -- | -- |
| Material Handling & Storage Piles | 1.17 | 0.55 | 0.08 | -- | -- | -- | -- | -- |
| Diesel Generators G-1, G-2, G-3 | 2.76 | 2.76 | 2.76 | 2.58 | 39.26 | 4.69 | 8.45 | 0.10 |
| Roads | 1.18 | 0.31 | 0.03 | -- | -- | -- | -- | -- |
| **TOTAL** | **24.67** | **9.89** | **8.08** | **2.58** | **39.26** | **4.69** | **8.45** | **0.10** |

**Appendix A: Emission Calculations**
**Crushing & Screening Operations**
(page 1 of 2)

**Company Name:** J.L. Smith Services DBA American Crushing & Recycling
**Address:** One North Broadway, Gary, Indiana 46402
**Significant Source Modification No.:** 089-28324-00509
**Significant Permit Modification No.:** 089-28415-00509
**Reviewer:** Jenny Acker
**Date:** August 17, 2009

| | | |
|---|---|---|
| Throughput Capacity of Screening Plant | 125 | ton/hr |
| Limited Throughput of Screening Plant | 430,000 | ton/year |

**Portable Screening Operation (Uncontrolled)**

| Operation Type | Maximum Capacity (tons/yr) | Emission Factor (lb PM per ton) | PTE of PM (tons/year) | Emission Factor (lb PM10 per ton) | PTE of PM10 (tons/year) | Emission Factor (lb PM2.5 per ton) | PTE of PM2.5 (tons/year) |
|---|---|---|---|---|---|---|---|
| **Truck Unloading | 1,095,000 | 8.80E-03 | 4.82 | 4.30E-03 | 2.35 | 1.60E-03 | 8.76E-01 |
| Screening Operation (1) | | | | | | | |
| *Conveyor T-1 Transfer Point | 1,095,000 | 0.0030 | 1.64 | 0.0011 | 0.60 | 0.0011 | 0.6023 |
| *Screening - 1st Screen | 1,095,000 | 0.025 | 13.69 | 0.0087 | 4.76 | 0.0087 | 4.7633 |
| *Screening - 2nd Screen | 1,095,000 | 0.025 | 13.69 | 0.0087 | 4.76 | 0.0087 | 4.7633 |
| *Fines Screening | 1,095,000 | 0.30 | 164.25 | 0.0720 | 39.42 | 0.0720 | 39.4200 |
| ***Conveyors T2 - T5 Transfer Points | 1,095,000 | 0.0054 | 2.98 | 0.0026 | 1.41 | 0.0004 | 0.2135 |
| *Tertiary Crushing | 1,095,000 | 0.0054 | 2.96 | 0.0024 | 1.31 | 0.0024 | 1.3140 |
| *Portable Stacker Conveyor (SC-1) (1) | 1,095,000 | 0.003 | 1.64 | 0.0011 | 0.60 | 0.0011 | 0.6023 |
| ***Portable Stacker Conveyor (SC-2) (1) | 1,095,000 | 0.0054 | 2.98 | 0.0026 | 1.41 | 0.0004 | 0.2135 |
| ***Material Handling & Storage Piles | 1,095,000 | 0.0054 | 2.98 | 0.0026 | 1.41 | 0.0004 | 0.2135 |
| | | **Modified Source PTE** | **211.63** | | **58.05** | | **52.98** |
| | | **New Emission Points PTE (1)** | **200.87** | | **52.97** | | **50.58** |

**Portable Screening Operation (Limited Throughput)**

| Operation Type | Maximum Capacity (tons/yr) | Emission Factor (lb PM per ton) | PTE of PM (tons/year) | Emission Factor (lb PM10 per ton) | PTE of PM10 (tons/year) | Emission Factor (lb PM2.5 per ton) | PTE of PM2.5 (tons/year) |
|---|---|---|---|---|---|---|---|
| **Truck Unloading | 430,000 | 0.0044 | 0.95 | 0.0022 | 0.46 | 0.0016 | 0.34 |
| Screening Operation (1) | | | | | | | |
| *Conveyor T-1 Transfer Point | 430,000 | 0.0015 | 0.32 | 0.00055 | 0.12 | 0.00055 | 0.12 |
| *Screening - 1st Screen | 430,000 | 0.0125 | 2.69 | 0.00435 | 0.94 | 0.00435 | 0.9353 |
| *Screening - 2nd Screen | 430,000 | 0.0125 | 2.69 | 0.00435 | 0.94 | 0.00435 | 0.9353 |
| *Fines Screening | 129,000 | 0.1500 | 9.68 | 0.0360 | 2.32 | 0.0360 | 2.3220 |
| ***Conveyors T2 - T5 Transfer Points | 430,000 | 0.0054 | 1.17 | 0.0026 | 0.55 | 0.0004 | 0.0839 |
| *Tertiary Crushing | 430,000 | 0.0027 | 0.58 | 0.0012 | 0.26 | 0.0012 | 0.2580 |
| *Portable Stacker Conveyor (SC-1) (1) | 430,000 | 0.0015 | 0.32 | 0.0006 | 0.12 | 0.0006 | 0.1183 |
| ***Portable Stacker Conveyor (SC-2) (1) | 430,000 | 0.0054 | 1.17 | 0.0026 | 0.55 | 0.0004 | 0.0839 |
| ***Material Handling & Storage Piles | 430,000 | 0.0054 | 1.17 | 0.0026 | 0.55 | 0.0004 | 0.0839 |
| | | **Modified Source PTE** | **20.73** | | **6.81** | | **5.28** |
| | | **New Emission Points PTE (1)** | **18.04** | | **5.54** | | **4.60** |

**Appendix A: Emission Calculations**
**Crushing & Screening Operations**
(page 2 of 2)

*Uncontrolled emission factors are from AP-42, Chapter 11.19.2 - Crushed Stone Processing, Table 11.19.2-2. (08/04)
* Controlled emission factors assume 50% control efficiency from wet suppresion
* PM2.5 emission factors = PM10 emission factors.
**Emission factor from AP-42, Chapter 12.5-4 - Iron and Steel Production
**Controlled emission factors assume 50% control efficiency from wet suppresion
***Emission factors for material handling & storage piles are from AP-42, Chapter 13.2.4 and calculated as shown below.
***Emission Factor in lb/ton = k*(0.0032) * [(U/5)^1.3 * 1/(M/2)^1.4]

| | | |
|---|---|---|
| K = particle size multiplier | 0.74 | PM |
| | 0.35 | PM10 |
| | 0.053 | PM2.5 |
| U = mean wind speed, m/sec | 10 | |
| M = material moisture content | 2.1 | |
| PM E.F (lb/ton) = | 0.0054 | PM |
| PM10 E.F (lb/ton) = | 0.0026 | PM10 |
| PM2.5 E.F (lb/ton) = | 0.0004 | PM2.5 |

**METHODOLOGY**
PTE for PM and PM10 (tons/year) = Max. Capacity (tons/hour) * Emission factor (lb/ton) * 8760 hours/year * 1 ton/2000 lbs

**Appendix A: Emission Calculations**
**Diesel No. 2 Fuel Oil Combustion Only**
**Three (3) Diesel Engine**
(page 1 of 2)

**Company Name:** J.L. Smith Services DBA American Crushing & Recycling
**Address:** One North Broadway, Gary, Indiana 46402
**Significant Source Modification No.:** 089-28324-00509
**Significant Permit Modification No.:** 089-28415-00509
**Reviewer:** Jenny Acker
**Date:** August 17, 2009

| Hp-hr | Heat Input Capacity MMBtu/hr | Potential Throughput (kgals/year) | |
|---|---|---|---|
| 300.00 | 2.10 | 134.3 | crusher (new) |
| 125.00 | 0.88 | 55.9 | screener (existing permitted) |
| 85.00 | 0.60 | 38.0 | SC-2 (new) |

**Pollutant**

| | * PM | * PM10/PM2.5 | $SO_2$ | NOx | VOC | CO |
|---|---|---|---|---|---|---|
| Emission Factor (lb/kgal) | 42.5 | 42.5 | 39.7 | 604 | | 130 |
| Emission Factor (lb/MMBtu) | | | | | 0.36 | |
| crusher (new) (G-1) | 2.85 | 2.85 | 2.67 | 40.55 | 3.31 | 8.73 |
| screener (permitted) (G-2) | 1.19 | 1.19 | 1.11 | 16.90 | 1.38 | 3.64 |
| SC-2 (new) (G-3) | 0.81 | 0.81 | 0.76 | 11.49 | 0.94 | 2.47 |
| **New Generators PTE (tons/year)** | 3.66 | 3.66 | 3.42 | 52.04 | 4.25 | 11.20 |
| **PTE Total (tons/year)** | **4.85** | **4.85** | **4.53** | **68.94** | **5.63** | **14.84** |

* PM and PM10 emission factors are filterable and condensable PM and PM10 combined.
One (1) gallon of No. 2 Fuel Oil has a heating value of 138,000 Btu.

Emission factors are from FIRE 6.23, Reciprocating Engine - SCC # 2-04-004-02.
Emission factor for VOC is from AP-42, Chapter 3.3 Table 3.3-1, SCC # 2-03-001-01 (10/96).
The sulfur content of the fuel used at the source is equal to 50%

**Total Limited Diesel Throughput (kgal/yr) =** **130** Kgals

| | * PM | * PM10/PM2.5 | $SO_2$ | NOx | VOC | CO |
|---|---|---|---|---|---|---|
| Emission Factor (lb/kgal) | 42.5 | 42.5 | 39.7 | 604 | | 130 |
| Emission Factor (lb/MMBtu) | | | | | 0.36 | |
| Potential To Emit (tons/year) | 2.76 | 2.76 | 2.58 | 39.26 | 4.69 | 8.45 |

**METHODOLOGY**
Potential throughput (kgals/year) = Heat input capacity (MMBtu/hour) * 8760 hours/year * 1 kgal/1000 gallon * 1 gallon/0.138 MMBtu
PTE of VOC (tons/year) = Heat Input Capacity (MMBtu/hour) * Emission factor (lb/MMBtu) * 8760 hours/year * 1 ton/2000 lbs
PTE of PM, PM10, $SO_2$, NOx, & CO (tons/year) = Potential throughput (kgal/year) * Emission factor (lb/kgal) * 1 ton/2000 lbs
See next page for HAPs emissions calculations.

**Appendix A: Emission Calculations**
**Diesel No. 2 Fuel Oil Combustion Only**
**Three (3) Diesel Engine**
(page 2 of 2)

**HAPs - Organics**

| | Benzene | Xylene | Propylene | Formaldehyde | Toluene |
|---|---|---|---|---|---|
| Emission Factor (lb/MMBtu) | 9.33E-04 | 2.85E-04 | 2.58E-03 | 1.18E-03 | 4.09E-04 |
| Potential To Emit (tons/year) | | | | | |
| G-1 & G-3 | 1.10E-02 | 3.36E-03 | 3.05E-02 | 1.39E-02 | 4.83E-03 |
| G-2 | 3.58E-03 | 1.09E-03 | 9.89E-03 | 4.52E-03 | 1.57E-03 |
| **Totals** | 1.46E-02 | 4.46E-03 | 4.03E-02 | 1.85E-02 | 6.40E-03 |

| | Acetaldehyde | Acrolein |
|---|---|---|
| Emission Factor (lb/MMBtu) | 7.67E-04 | 9.25E-05 |
| Potential To Emit (tons/year) | | |
| G-1 & G-3 | 9.05E-03 | 1.09E-03 |
| G-2 | 2.94E-03 | 3.55E-04 |
| **Totals** | 1.20E-02 | 1.45E-03 |

Emission factors for HAPs are from AP-42, Chapter 3.3, Table 3.3-2 (10/96).

**METHODOLOGY**
PTE of HAPs (tons/year) = Heat input capacity (MMBtu/hour) * Emission factor (lb/MMBtu) * 8760 hours/year * 1 ton/2000 lbs.

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We Protect Hoosiers and Our Environment.*

*Mitchell E. Daniels Jr.*
**Governor**

*Thomas W. Easterly*
**Commissioner**

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


**SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED**

TO: Joseph L. Smith
USS -J. L. Smith Services-contractor of US Steel
2484 Lindair Dr
Springfield, OH 45502

DATE: December 10, 2009

FROM: Matt Stuckey, Branch Chief
Permits Branch
Office of Air Quality

SUBJECT: Final Decision
Part 70 SSM
089-28415-00509

Enclosed is the final decision and supporting materials for the air permit application referenced above. Please note that this packet contains the original, signed, permit documents.

The final decision is being sent to you because our records indicate that you are the contact person for this application. However, if you are not the appropriate person within your company to receive this document, please forward it to the correct person.

A copy of the final decision and supporting materials has also been sent via standard mail to:
«Resp_Off_If_applicable»
«Consultant_if_applicable»
«Other_persons»
OAQ Permits Branch Interested Parties List

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178, or toll-free at 1-800-451-6027 (ext. 3-0178), and ask to speak to the permit reviewer who prepared the permit. If you think you have received this document in error, please contact Joanne Smiddie-Brush of my staff at 1-800-451-6027 (ext 3-0185), or via e-mail at jbrush@idem.IN.gov.

Final Applicant Cover letter.dot 11/30/07

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**
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Indianapolis, Indiana 46204
(317) 232-8603
Toll Free (800) 451-6027
**www.idem.IN.gov**

December 10, 2009

TO: Gary Public Library

From: Matthew Stuckey, Branch Chief
Permits Branch
Office of Air Quality

Subject: **Important Information for Display Regarding a Final Determination**

**Applicant Name: USS -J. L. Smith Services-contractor of US Steel**
**Permit Number: 089-28415-00509**

You previously received information to make available to the public during the public comment period of a draft permit. Enclosed is a copy of the final decision and supporting materials for the same project. Please place the enclosed information along with the information you previously received. To ensure that your patrons have ample opportunity to review the enclosed permit, **we ask that you retain this document for at least 60 days.**

The applicant is responsible for placing a copy of the application in your library. If the permit application is not on file, or if you have any questions concerning this public review process, please contact Joanne Smiddie-Brush, OAQ Permits Administration Section at 1-800-451-6027, extension 3-0185.

Enclosures
Final Library.dot 11/30/07

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**
*We Protect Hoosiers and Our Environment.*

*Mitchell E. Daniels Jr.*
**Governor**

*Thomas W. Easterly*
**Commissioner**

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

TO: Interested Parties / Applicant

DATE: December 10, 2009

RE: USS -J. L. Smith Services-contractor of US Steel / 089-28415-00509

FROM: Matthew Stuckey, Branch Chief
Permits Branch
Office of Air Quality

In order to conserve paper and reduce postage costs, IDEM's Office of Air Quality is now sending many permit decisions on CDs in Adobe PDF format. The enclosed CD contains information regarding the company named above.

This permit is also available on the IDEM website at:
http://www.in.gov/ai/appfiles/idem-caats/

If you would like to request a paper copy of the permit document, please contact IDEM's central file room at:

Indiana Government Center North, Room 1201
100 North Senate Avenue, MC 50-07
Indianapolis, IN 46204
Phone: 1-800-451-6027 (ext. 4-0965)
Fax (317) 232-8659

**Please Note:** *If you feel you have received this information in error, or would like to be removed from the Air Permits mailing list, please contact Patricia Pear with the Air Permits Administration Section at 1-800-451-6027, ext. 3-6875 or via e-mail at PPEAR@IDEM.IN.GOV.*

Enclosures
CD Memo.dot 11/14/08

# Mail Code 61-53

| IDEM Staff | CDENNY 12/10/2009<br>USS -J. L. Smith Services-089-28415-00509 (final) | | | AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING |
|---|---|---|---|---|
| Name and address of Sender | ▶ | Indiana Department of Environmental Management<br>Office of Air Quality – Permits Branch<br>100 N. Senate<br>Indianapolis, IN 46204 | Type of Mail:<br>**CERTIFICATE OF MAILING ONLY** | |

| Line | Article Number | Name, Address, Street and Post Office Address | Postage | Handing Charges | Act. Value (If Registered) | Insured Value | Due Send if COD | R.R. Fee | S.D. Fee | S.H. Fee | Rest. Del. Fee<br>Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | Joseph L. Smith USS -J. L. Smith Services-contractor of US Steel 2484 Lindair Dr Springfield OH 45502 (Source CAATS) | | | | | | | | | |
| 2 | | Gary - Hobart Water Corp 650 Madison St, P.O. Box M486 Gary IN 46401-0486 *(Affected Party)* | | | | | | | | | |
| 3 | | Gary Mayors Office 401 Broadway # 203 Gary IN 46402 *(Local Official)* | | | | | | | | | |
| 4 | | Gary Public Library 220 W 5th Avenue Gary IN 46402 *(Library)* | | | | | | | | | |
| 5 | | Lake County Health Department-Gary 1145 W. 5th Ave Gary IN 46402-1795 *(Health Department)* | | | | | | | | | |
| 6 | | WJOB / WZVN Radio 6405 Olcott Ave Hammond IN 46320 *(Affected Party)* | | | | | | | | | |
| 7 | | Laurence A. McHugh Barnes & Thornburg 100 North Michigan South Bend IN 46601-1632 *(Affected Party)* | | | | | | | | | |
| 8 | | Shawn Sobocinski 3229 E. Atlanta Court Portage IN 46368 *(Affected Party)* | | | | | | | | | |
| 9 | | Ms. Carolyn Marsh Lake Michigan Calumet Advisory Council 1804 Oliver St Whiting IN 46394-1725 *(Affected Party)* | | | | | | | | | |
| 10 | | Mark Coleman 9 Locust Place Ogden Dunes IN 46368 *(Affected Party)* | | | | | | | | | |
| 11 | | Mr. Chris Hernandez Pipefitters Association, Local Union 597 8762 Louisiana St., Suite G Merrillville IN 46410 *(Affected Party)* | | | | | | | | | |
| 12 | | Craig Hogarth 7901 West Morris Street Indianapolis IN 46231 *(Affected Party)* | | | | | | | | | |
| 13 | | Lake County Commissioners 2293 N. Main St, Building A 3rd Floor Crown Point IN 46307 (Local Official) | | | | | | | | | |
| 14 | | Anthony Copeland 2006 E. 140th Street East Chicago IN 46312 *(Affected Party)* | | | | | | | | | |
| 15 | | Barbara G. Perez 506 Lilac Street East Chicago IN 46312 *(Affected Party)* | | | | | | | | | |

| Total number of pieces Listed by Sender | Total number of Pieces Received at Post Office | Postmaster, Per (Name of Receiving employee) | The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is $50,000 per piece subject to a limit of $50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is $500. The maximum indemnity payable is $25,000 for registered mail, sent with optional postal insurance. See ***Domestic Mail Manual*** **R900, S913**, and **S921** for limitations of coverage on inured and COD mail. See ***International Mail Manual*** for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels. |
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FACSIMILIE OF PS Form 3877

# Mail Code 61-53

| | | | | |
|---|---|---|---|---|
| IDEM Staff | CDENNY 12/10/2009<br>USS -J. L. Smith Services-089-28415-00509 (final) | | | AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING |
| Name and address of Sender | ▶ | Indiana Department of Environmental Management<br>Office of Air Quality – Permits Branch<br>100 N. Senate<br>Indianapolis, IN 46204 | Type of Mail:<br>**CERTIFICATE OF MAILING ONLY** | |

| Line | Article Number | Name, Address, Street and Post Office Address | Postage | Handing Charges | Act. Value (If Registered) | Insured Value | Due Send if COD | R.R. Fee | S.D. Fee | S.H. Fee | Rest. Del. Fee<br>Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | Robert 3733 Parrish Avenue East Chicago IN 46312 (Affected Party) | | | | | | | | | |
| 2 | | Ms. Karen Kroczek 8212 Madison Ave Munster IN 46321-1627 *(Affected Party)* | | | | | | | | | |
| 3 | | Calumet Township Trustee 35 E 5th Avenue Gary IN 46402 *(Affected Party)* | | | | | | | | | |
| 4 | | Joseph Hero 11723 S Oakridge Drive St. John IN 46373 *(Affected Party)* | | | | | | | | | |
| 5 | | Gary City Council 401 Broadway # 209 Gary IN 46402 *(Local Official)* | | | | | | | | | |
| 6 | | | | | | | | | | | |
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**Appendix A: Emission Calculations**
**Fugitive Emissions From Paved and Unpaved Roads**

**Company Name:** J.L. Smith Services DBA American Crushing & Recycling
**Address:** One North Broadway, Gary, Indiana 46402
**Significant Source Modification No.:** 089-28324-00509
**Significant Permit Modification No.:** 089-28415-00509
**Reviewer:** Jenny Acker
**Date:** August 17, 2009

**1. Unpaved Road Emission Factors: AP-42**

Using AP-42, Section 13.2.2 Unpaved Roads, November 2006, the PM/PM10/PM2.5 emission factors for unpaved roads can be estimated from the following equation:

lbs/VMT Equation: $E= k (s/12)^a (W/3)^b [(365 - P)/365]$

Where:

| | | | | |
|---|---|---|---|---|
| Particle size multiplier k | 4.9 | dimensionless (PM-30 or TSP) | 1.5 | dimensionless PM-10 |
| | 0.15 | dimensionless PM-2.5 | | |
| surface material silt content (%) s | 6 | Table 13.2.2-1 | | |
| mean vehicle weight W | 22.32 | tons | | |
| Equation constants a | 0.7 | PM-30 or TSP Table 13.2.2-2 | 0.9 | PM-10 Table 13.2.2-2 |
| | 0.9 | PM-2.5 Table 13.2.2-3 | | |
| b | 0.45 | PM-2.5 Table 13.2.2-2 | 0.45 | PM-10 Table 13.2.2-2 |
| | 0.45 | PM-30 or TSP Table 13.2.2-3 | | |
| days with at least 0.01" precipitation P | 135 | Figure 13.2.2-1 | | |

| | | | |
|---|---|---|---|
| PM Emission Factor = | $(4.9) \times (6/12)^{0.7} \times (42.5/3)^{0.45}$ [(365-135)/365] = | **4.69** | lbs/mile |
| PM10 Emission Factor = | $(1.5) \times (6/12)^{0.9} \times (42.5/3)^{0.45}$ [(365-135)/365] = | **1.25** | lbs/mile |
| PM2.5 Emission Factor = | $(0.15) \times (6/12)^{0.9} \times (42.5/3)^{0.45}$ [(365-135)/365] = | **0.12** | lbs/mile |

**2. Potential to Emit (PTE) of PM/PM10 from unpaved Roads:**

| | | |
|---|---|---|
| Raw Material Thoughput = | 430,000 | tons per year |
| Capacity per Load = | 6.5 | tons per bucket |
| Unloaded Weight of Loader = | 19.07 | tons |
| Loaded Weight of Loader = | 25.57 | tons |

| Vehicle Type | Ave Weight of Vehicles (tons) | Maximum Trip Number (trips/yr) | Round Trip Distance (mile/trip) | Vehicle Mile Traveled (VMT) (miles/yr) | Traffic Component (%) | Component Vehicle Weight (tons) | PTE of PM (tons/yr) | PTE of $PM_{10}$ (tons/yr) | PTE of $PM_{2.5}$ (tons/yr) |
|---|---|---|---|---|---|---|---|---|---|
| Loader | 22.3 | 66,154 | 0.08 | 5,012 | 100.0% | 22.32 | 11.8 | 3.13 | 0.31 |

**Methodology**
Total Vehicle Emissions (tons/yr) = Unpaved Total VMT (miles/yr) x PM/PM10 Emission Factors x 1 ton/2000 lbs

**3. Potential to Emit (PTE) of PM/PM10/PM2.5 after Control from Unpaved Roads:**

The source will use periodic application of water and high material moistures to control the fugitive dust emissions.
Application of water will be sufficent to achieve and maintain surface moisture content of 8%.
The control efficiency from the application is assumed to be 90%.
Source Air Pollution Control Manual, 1992, Air Waste & Management Assoc. pg 144.

| | | | | |
|---|---|---|---|---|
| PTE of PM after Control = | 11.8 | tons/yr x (1-90%) = | **1.18** | **tons/yr** |
| PTE of PM10 after Control = | 3.13 | tons/yr x (1-90%) = | **0.31** | **tons/yr** |
| PTE of PM2.5 after Control = | 0.31 | tons/yr x (1-90%) = | **0.03** | **tons/yr** |