



Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant
DATE: November 13, 2006
RE: Hayes Lemmerz International / 169-17972-00042
FROM: Nisha Sizemore
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval – Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted, 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 4-21.5-3-7 and IC 13-15-6-1(b) or IC 13-15-6-1(a) require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204.

For an **initial Title V Operating Permit**, a petition for administrative review must be submitted to the Office of Environmental Adjudication within **thirty (30)** days from the receipt of this notice provided under IC 13-15-5-3, pursuant to IC 13-15-6-1(b).

For a **Title V Operating Permit renewal**, a petition for administrative review must be submitted to the Office of Environmental Adjudication within **fifteen (15)** days from the receipt of this notice provided under IC 13-15-5-3, pursuant to IC 13-15-6-1(a).

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.

Pursuant to 326 IAC 2-7-18(d), any person may petition the U.S. EPA to object to the issuance of an initial Title V operating permit, permit renewal, or modification within sixty (60) days of the end of the forty-five (45) day EPA review period. Such an objection must be based only on issues that were raised with reasonable specificity during the public comment period, unless the petitioner demonstrates that it was impracticable to raise such issues, or if the grounds for such objection arose after the comment period.

To petition the U.S. EPA to object to the issuance of a Title V operating permit, contact:

U.S. Environmental Protection Agency
401 M Street
Washington, D.C. 20406

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.



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PART 70 OPERATING PERMIT RENEWAL OFFICE OF AIR QUALITY

**Hayes Lemmerz International – Wabash, Inc.
3837 West Mill Street Extended
Wabash, Indiana 46992**

(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.

Operation Permit No.: T169-17972-00042	
Issued by: Original Signed By: Nisha Sizemore, Chief Permits Branch Office of Air Quality	Issuance Date: November 13, 2006 Expiration Date: November 13, 2011

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SECTION A SOURCE SUMMARY

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

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

The Permittee owns and operates a stationary aluminum production operation that manufactures aluminum motor vehicle parts.

Responsible Official:	Plant Manager
Source Address:	3837 West Mill Street Extended, Wabash, IN 46992
Mailing Address:	3837 West Mill Street Extended, Wabash, IN 46992
General Source Phone Number:	(260) 563-8371
SIC Code:	3714
County Location:	Wabash
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Major Source, under PSD Rules; Major Source, Section 112 of the Clean Air Act 1 of 28 Source Categories

A.2 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) melting and combustion operation (S-1), constructed in 1992, consisting of two (2) reverberatory furnaces each processing aluminum at a rate of 7.0 tons per hour, using a maximum of 54 pounds of solid flux per hour, each rated at 39.0 million British thermal units (MMBtu) per hour, combusting natural gas, and exhausting to two (2) stacks (Stacks S-1A and S-1B). These furnaces do not melt simultaneously;
- (b) One (1) melting and combustion operation (S-2), constructed in 1992, consisting of one (1) crucible furnace processing aluminum at a rate of 1.25 tons per hour, using a maximum of 10 pounds of solid flux per hour, rated at 7.0 MMBtu per hour, combusting natural gas, exhausting at one (1) stack (Stack S-2A);
- (c) One (1) mold making and sand reclamation operation (SC-1), constructed in 1978, with a maximum metal throughput of 11.39 tons per hour and a maximum sand throughput of 180 tons per hour with a cyclone wet scrubber (East Cyclone Wet Scrubber) for particulate matter control and exhausting to one (1) stack (Stack SC-1A);
- (d) One (1) shakeout and vibrating dump conveyor (SC-2), constructed in 1978, with a maximum metal throughput of 11.39 tons per hour with a cyclone wet scrubber (West Cyclone Wet Scrubber) for particulate matter control and exhausting to one (1) stack (Stack SC-2A);
- (e) One (1) knockout operation (BH-1), constructed in 1978, with a maximum sand throughput of 13.14 tons per hour, including a rotary sand separator with a baghouse for particulate matter control, exhausting to one (1) stack (Stack BH-1A);

- (f) One (1) pouring operation (F-1), constructed in 1978, utilizing molten aluminum from the melting operations for a process rate of 11.39 tons per hour, exhausting to the general plant ventilation;
- (g) Six (6) Sutter core machines (SC-3), each constructed in 1978, each capable of producing a maximum of 6,300 pounds of sand cores per hour, using a phenolic urethane cold box core making process, using a maximum of 3.2 pounds of TEA catalyst per ton of sand cores, with six (6) acid scrubbers for VOC control and exhausting to six (6) stacks (Stacks SC-3A, SC-3B, SC-3C, SC-3D, SC-3E, and SC-3F);
- (h) Two (2) CB core machines (SC-4), each constructed in 1994, each capable of producing a maximum of 3,300 pounds of sand cores per hour, using a phenolic urethane cold box core making process, using a maximum of 3.06 pounds of TEA catalyst per ton of sand cores, with one (1) acid scrubber for VOC control and exhausting to one (1) stack (Stack SC-4A);
- (i) One (1) manual prototype core making operation (SC-5), constructed in 1978, with a maximum capacity of processing 200 pounds of sand per hour, using a phenolic urethane no bake core making process, using a maximum of 1.5 pounds of VOC catalyst per ton of sand, having no emission control equipment and exhausting to the general plant ventilation.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)]
[326 IAC 2-7-5(15)]

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

- (a) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate of less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive lasing; pneumatic conveying; and woodworking operations:
 - (1) Twelve (12) dry grinders (BH-2) with two (2) dust collectors for particulate matter control; [326 IAC 6-3-2]
 - (2) Goff Blast # 1 with one (1) dust collector for particulate matter control, with a gas flow rate of 2,000 acfm and a design grain loading of less than 0.03 dscf; [326 IAC 6-3-2]
 - (3) Goff Blast # 2 with one (1) dust collector for particulate matter control, with a gas flow rate of 3,700 acfm and a design grain loading of less than 0.03 dscf; [326 IAC 6-3-2]
 - (4) Goff Blast # 3 with one (1) dust collector for particulate matter control, with a gas flow rate of 3,700 acfm and a design grain loading of less than 0.03 dscf; [326 IAC 6-3-2]
- (b) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6;
 - (1) One (1) cleaner with a remote solvent reservoir. [326 IAC 8-3-2]
- (c) Trimmers that do not produce fugitive emissions that are equipped with a dust collection or trim material recovery device such as a bag filter or cyclone; [326 IAC 6-3-2]
- (d) Ten (10) knockout hammers with particulate matter emissions less than 5 pounds per hour or 25 pounds per day. (Part of knockout operation) [326 IAC 6-3-2]

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, T169-17972-00042, 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]

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 a 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. All certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
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 maintain and implement Preventive Maintenance Plans (PMPs) including the following information on each facility:
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) A copy of the PMPs shall be submitted to IDEM, OAQ, 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, 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 Section), or
Telephone Number: 317-233-0178 (ask for Compliance Section)
Facsimile Number: 317-233-6865

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

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

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.

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 T169-17972-00042 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 permit, all previous registrations and permits are superseded by this 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 Data Section, Office of Air Quality
100 North Senate Avenue
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 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
Permits Branch, Office of Air Quality
100 North Senate Avenue
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
Permits Branch, Office of Air Quality
100 North Senate Avenue
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
Permits Branch, Office of Air Quality
100 North Senate Avenue
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] [326 IAC 2-2-2]

- (a) A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-7-10.5.
- (b) Any modification at an existing major source is governed by the requirements of 326 IAC 2-2-2.

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
Permits Branch, Office of Air Quality
100 North Senate Avenue
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 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]

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

C.2 Opacity [326 IAC 5-1]

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

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

C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.

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

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.6 Stack Height [326 IAC 1-7]

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

C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
 - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
 - (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

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

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 Accredited Asbestos Inspector**
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.

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

C.8 Performance Testing [326 IAC 3-6]

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

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

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

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.9 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.10 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 thirty (30) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within thirty (30) days, the Permittee may extend the compliance schedule related to the equipment for an additional thirty (30) days provided the Permittee notifies:

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

in writing, prior to the end of the initial thirty (30) 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.11 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

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

C.12 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

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

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

C.13 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

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

- (a) The Permittee prepared and submitted written emergency reduction plans (ERPs) consistent with safe operating procedures on November 17, 1997.
- (b) Upon direct notification by IDEM, OAQ, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level.
[326 IAC 1-5-3]

C.14 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.15 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;
 - (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.16 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 and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require the certification by the "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.17 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
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.18 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 2-3-1 (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 2-3-1 (mm)), the Permittee shall comply with following:
 - (1) Prior to commencing the 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.19 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) 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 a 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.

Stratospheric Ozone Protection

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

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

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

SECTION D.1 FACILITY OPERATION CONDITIONS

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

- (a) One (1) melting and combustion operation (S-1), constructed in 1992, consisting of two (2) reverberatory furnaces each processing aluminum at a rate of 7.0 tons per hour, using a maximum of 54 pounds of solid flux per hour, each rated at 39.0 million British thermal units (MMBtu) per hour, combusting natural gas, and exhausting to two (2) stacks (Stacks S-1A and S-1B). These furnaces do not melt simultaneously;
- (b) One (1) melting and combustion operation (S-2), constructed in 1992, consisting of one (1) crucible furnace processing aluminum at a rate of 1.25 tons per hour, using a maximum of 10 pounds of solid flux per hour, rated at 7.0 MMBtu per hour, combusting natural gas, exhausting at one (1) stack (Stack S-2A);

(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 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the melting and combustion operations, S-1 and S-2, shall be limited as follows:

Emission Unit ID	Process Weight Rate, tons/hr	Allowable Particulate Emissions, lb/hr
Reverberatory Furnaces (S-1)	7.0	15.10
Crucible Furnace (S-2)	1.25	4.76

These limits were based on the following:

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

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

D.1.2 Stack Height

Pursuant to CP 169-2533-00042, issued December 10, 1992, the reverberatory furnace stacks must have a release height of 80 feet above the ground (35 feet above the roof), and be upward-pointing. They must not be equipped with rain caps.

D.1.3 PSD Minor Limits [326 IAC 2-2]

- (a) The input of solid flux to the two (2) reverberatory furnaces shall not exceed 473,040 pounds per 12 consecutive month period, with compliance determined at the end of each month.
- (b) The input of solid flux to the crucible furnace shall not exceed 87,600 pounds per 12 consecutive month period, with compliance determined at the end of each month.
- (c) The input of metal to the two (2) reverberatory furnaces shall not exceed 61,320 tons per 12 consecutive month period, with compliance determined at the end of each month.

- (d) The input of metal to the crucible furnace shall not exceed 10,950 tons per 12 consecutive month period, with compliance determined at the end of each month.
- (e) Emissions of PM and PM10 from each of the two (2) reverberatory furnaces and from the crucible furnace shall not exceed 1.51 pounds per ton of metal and flux throughput.

These limits will ensure that PM and PM10 emissions from the reverberatory furnaces and the crucible furnaces do not exceed 100 tons per year so that the requirements of 326 IAC 2-2 (PSD) do not apply.

D.1.4 Secondary Aluminum NESHAP [40 CFR 63, Subpart RRR]

Each of the two (2) reverberatory furnaces and the one (1) crucible furnace shall only melt clean charge, customer returns, or internal scrap as defined under 40 CFR 63.1503. Therefore, the requirements of 40 CFR 63, Subpart RRR do not apply.

D.1.5 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 and any control devices.

Compliance Determination Requirements

D.1.6 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Prior to April, 2007, in order to demonstrate compliance with Conditions D.1.1 and D.1.3(e) and to verify the HAP emission factors used, the Permittee shall perform PM, PM-10, HCl, HFI, and Cl testing on one (1) of the two (2) reverberatory furnaces while fluxing is occurring utilizing methods as approved by the Commissioner. The test for PM and PM10 shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM-10 includes filterable and condensable PM-10. Testing shall be conducted in accordance with Section C- Performance Testing.

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

D.1.7 Visible Emissions Notations

- (a) Visible emission notations of the reverberatory furnace stack exhausts (Stacks S-1A and S-1B) and the crucible furnace stack exhaust (Stack S-2A) shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

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

D.1.8 Record Keeping Requirements

- (a) To document compliance with Condition D.1.3, the Permittee shall maintain monthly records of the flux usage and metal throughput for the two (2) reverberatory furnaces and the crucible furnace.
- (b) To document compliance with Condition D.1.7, the Permittee shall maintain records of visible emission notations of the reverberatory furnaces and crucible furnace stack exhausts (S-1A, S-1B, and S-2A) once per day.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.9 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.3 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their 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 D.2 FACILITY OPERATION CONDITIONS

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

- (c) One (1) mold making and sand reclamation operation (SC-1), constructed in 1978, with a maximum metal throughput of 11.39 tons per hour and a maximum sand throughput of 180 tons per hour with a cyclone wet scrubber (East Cyclone Wet Scrubber) for particulate matter control and exhausting to one (1) stack (Stack SC-1A);
- (d) One (1) shakeout and vibrating dump conveyor (SC-2), constructed in 1978, with a maximum metal throughput of 11.39 tons per hour with a cyclone wet scrubber (West Cyclone Wet Scrubber) for particulate matter control and exhausting to one (1) stack (Stack SC-2A);
- (e) One (1) knockout operation (BH-1), constructed in 1978, with a maximum sand throughput of 13.14 tons per hour, including a rotary sand separator with a baghouse for particulate matter control, exhausting to one (1) stack (Stack BH-1A);
- (f) One (1) pouring operation (F-1), constructed in 1978, utilizing molten aluminum from the melting operations for a process rate of 11.39 tons per hour, exhausting to the general plant ventilation;

Insignificant Activity

- (d) Ten (10) knockout hammers with particulate matter emissions less than 5 pounds per hour or 25 pounds per day. (Part of knockout operation) [326 IAC 6-3-2]

(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.2.1 PSD Minor Limits [326 IAC 2-2]

- (a) The usage of VOC, including mold release agent and cleaning solvents in the mold making machine of the mold making and sand reclamation operation (SC-1) shall not exceed 12.45 tons per 12 consecutive month period with compliance determined at the end of each month;
- (b) VOC emissions from the mold making and sand reclamation operation (SC-1), other than those from mold release agent and cleaning solvent usage, shall not exceed 0.06 pounds per ton of metal throughput;
- (c) The throughput of metal to the mold making and sand reclamation operation (SC-1) shall not exceed 99,776 tons per twelve (12) consecutive month period, with compliance determined at the end of each month;
- (d) VOC emissions from the shakeout and vibrating dump conveyor (SC-2) shall not exceed 0.47 pound per ton of metal throughput;
- (e) The throughput of metal to the shakeout and vibrating dump conveyor (SC-2) shall not exceed 75,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month;
- (f) VOC emissions from the knockout operation (BH-1) shall not exceed 0.44 pounds per ton of sand throughput;

- (g) The throughput of sand to the knockout operation (BH-1) shall not exceed 75,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month;
- (h) VOC emissions from the pouring operation (F-1) shall not exceed 0.14 pound per ton of metal throughput;
- (i) The throughput of metal to the pouring operation (F-1) shall not exceed 99,776 tons per twelve (12) consecutive month period, with compliance determined at the end of each month;

These limits are required to limit the total potential to emit of VOC from all emission units installed in 1978 to less than 100 tons per year so that the requirements of 326 IAC 2-2 (PSD) are not applicable.

- (j) PM and PM10 emissions from mold making and sand reclamation operation (SC-1) shall not exceed 5.55 and 5.98 pounds per hour, respectively;
- (k) PM and PM10 emissions from the shakeout and vibrating dump conveyor (SC-2) shall not exceed 5.05 and 4.48 pounds per hour, respectively;
- (l) PM and PM10 emissions from the knockout operation (BH-1) shall not exceed 1.4 and 1.64 pounds per hour, respectively; and
- (m) PM and PM10 emissions from the pouring/casting operation (F-1) shall not exceed 10.8 and 10.71 pounds per hour, respectively.

These limits are required to limit the potential to emit of PM and PM10 from all emission units installed in 1978 each to less than 100 tons per year so that the requirements of 326 IAC 2-2 (PSD) are not applicable.

- (n) Total CO emissions from pouring (F-1), cooling, and shakeout (SC-2) operations shall not exceed 2.664 pound per ton of metal throughput;
- (o) The throughput of metal to the pouring, cooling, and shakeout operations shall not exceed 75,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

This limit is required to limit the potential to emit of CO from all emission units installed in 1978 to less than 100 tons per year so that the requirements of 326 IAC 2-2 (PSD) are not applicable.

D.2.2 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the facilities listed in the table below shall be as follows:

Emission Unit ID	Process Weight Rate, tons/hr	Allowable Particulate Emissions, lb/hr
Mold Making and Sand Reclamation (SC-1)	11.39	20.92
Shakeout and Vibrating Dump Conveyor (SC-2)	11.39	20.92
Knockout (BH-1) including knockout hammers	13.14	23.03
Pouring (F-1)	11.39	20.92

The pounds per hour limitations were calculated with the following equation:

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

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

D.2.3 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 the mold making and sand reclamation operation, the shakeout and vibrating dump conveyor, and the knockout operation and their control devices, and the pouring operation.

Compliance Determination Requirements

D.2.4 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

- (a) Prior to April, 2007, in order to demonstrate compliance with Conditions D.2.1 and D.2.2, the Permittee shall perform PM and PM-10 testing on the mold making and sand reclamation operation (SC-1) and the shakeout and vibrating dump conveyor operations (SC-2) utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM-10 includes filterable and condensable PM-10. Testing shall be conducted in accordance with Section C - Performance Testing.
- (b) Within 90 days after issuance of this Part 70 permit, in order to demonstrate compliance with Condition D.2.1(n), the Permittee shall perform CO testing on the pouring (F-1), cooling, and shakeout (SC-2) operations utilizing methods as approved by the Commissioner. Testing shall be conducted in accordance with Section C - Performance Testing.
- (c) Within 90 days after issuance of this Part 70 permit, in order to demonstrate compliance with Conditions D.2.1(m) and D.2.2, the Permittee shall perform PM and PM-10 testing for the pouring operation (F-1) utilizing methods as approved by the Commissioner. PM-10 includes filterable and condensable PM-10. Testing shall be conducted in accordance with Section C - Performance Testing.

D.2.5 Particulate Control

- (a) In order to comply with conditions D.2.1 and D.2.2, the cyclone wet scrubbers (East and West Cyclone Wet Scrubbers) and the baghouse (BH-1A) for particulate control shall be in operation and control emissions from the Mold Making and Sand Reclamation (SC-1), the Shakeout and Vibrating Dump Conveyor (SC-2), and the Knockout process (BH-1) at all times that these facilities are in operation.
- (b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

D.2.6 Volatile Organic Compounds (VOC)

Compliance with the VOC content and usage limitations contained in Condition D.2.1(a) shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) by preparing or obtaining from the manufacturer the copies of the "as supplied" and "as applied" VOC data sheets. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

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

D.2.7 Visible Emissions Notations [40 CFR 64]

- (a) Visible emission notations of each of the East and West Cyclone Wet Scrubber stack exhausts (Stacks SC-1A and SC-2A) and the knockout operation baghouse stack exhaust (BH-1A) shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.2.8 Parametric Monitoring [40 CFR 64]

- (a) The Permittee shall record the liquid flow rate and pressure drop across the cyclone wet scrubber used in conjunction with the mold making and sand reclamation operation, at least once per day when the mold making and sand reclamation is in operation. When for any one reading, the flow rate of the cyclone wet scrubber is less than 50 gallons per minute or a range established during the latest stack test, or the pressure drop across the cyclone wet scrubber is outside the normal range of 2.0 to 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. A flow rate that is less than 50 gallons per minute or a pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.
- (b) The Permittee shall record the liquid flow rate and pressure drop across the cyclone wet scrubber used in conjunction with the Shakeout and Vibrating Dump Conveyor (SC-2), at least once per day when the Shakeout and Vibrating Dump Conveyor (SC-2) is in operation. When for any one reading, the flow rate of the cyclone wet scrubber is less than 50 gallons per minute or a range established during the latest stack test, or the pressure drop across the cyclone wet scrubber is outside the normal range of 2.0 to 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A flow rate that is less than 50 gallons per minute or a pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

- (c) The Permittee shall record the pressure drop across the baghouse used in conjunction with the knockout and rotary sand separator process, at least once per day when the knockout and rotary sand separator process is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 0.5 to 5.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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

D.2.9 Cyclone Wet Scrubber Failure Detection

In the event that cyclone wet scrubber failure has been observed:

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

D.2.10 Broken or Failed Bag Detection

- (a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
- (b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the emissions unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

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

D.2.11 Record Keeping Requirements

- (a) To document compliance with Condition D.2.1(a), the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained for (1) through (3) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.2.1(a). Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.
- (1) The amount and VOC content of each solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used;

- (2) The total VOC usage for each month; and
 - (3) The weight of VOCs emitted for each compliance period.
- (b) To document compliance with Condition D.2.1(c), (e), (g), (i) and (o), the Permittee shall maintain monthly records of the metal throughput for each of the mold making and sand reclamation operation (SC-1), the shakeout and vibrating dump conveyor (SC-2), and the pouring operation (F-1) and the monthly throughput of sand to the knockout operation (BH-1).
 - (c) To document compliance with Condition D.2.7, the Permittee shall maintain once per day records of visible emission notations of the East and West Cyclone Wet Scrubber stack exhausts (Stacks SC-1A and SC-2A) and the knockout operation baghouse stack exhaust (BH-1A).
 - (d) To document compliance with Condition D.2.8(a) and (b), the Permittee shall maintain records once per day of the liquid flow rate and pressure drop for each of the East and West Cyclone Wet Scrubbers during normal operation.
 - (e) To document compliance with Condition D.2.8(c), the Permittee shall maintain records once per day of the pressure drop of the baghouse for the knockout operation during normal operation.
 - (f) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.2.12 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.2.1(a), (c), (e), (g), (i), and (o) shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their 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 D.3 FACILITY OPERATION CONDITIONS

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

- (g) Six (6) Sutter core machines (SC-3), each constructed in 1978, each capable of producing a maximum of 6,300 pounds of sand cores per hour, using a phenolic urethane cold box core making process, using a maximum of 3.2 pounds of TEA catalyst per ton of sand cores, with six (6) acid scrubbers for VOC control and exhausting to six (6) stacks (Stacks SC-3A, SC-3B, SC-3C, SC-3D, SC-3E, and SC-3F);
- (h) Two (2) CB core machines (SC-4), each constructed in 1994, each capable of producing a maximum of 3,300 pounds of sand cores per hour, using a phenolic urethane cold box core making process, using a maximum of 3.06 pounds of TEA catalyst per ton of sand cores, with one (1) acid scrubber for VOC control and exhausting to one (1) stack (Stack SC-4A);
- (i) One (1) manual prototype core making operation (SC-5), constructed in 1978, with a maximum capacity of processing 200 pounds of sand per hour, using a phenolic urethane no bake core making process, using a maximum of 1.5 pounds of VOC catalyst per ton of sand, having no emission control equipment and exhausting to the general plant ventilation.

(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.3.1 PSD Minor Limit [326 IAC 2-2]

- (a) The total resin usage for the six (6) Sutter core machines shall not exceed 600,000 pounds of resin per 12 consecutive month period, with compliance determined at the end of each month. Total catalyst usage for the six (6) Sutter core machines shall not exceed 100,000 pounds of VOC catalyst per 12 consecutive month period, with compliance determined at the end of each month.
- (b) The VOC emissions from resin usage in the six (6) Sutter core machines shall not exceed 0.05 pound per pound of resin.
- (c) The VOC emissions from catalyst usage in the six (6) Sutter core machines shall not exceed 0.1 pound per pound of catalyst after control.
- (d) The usage of VOC in the six (6) Sutter core machines, including all solvents other than resin or catalyst, shall be less than 20.0 tons per 12 consecutive month period with compliance determined at the end of each month.

The resin and catalyst usage limits and the VOC emission limits and usage limit for the six (6) Sutter core machines and the operation of the six (6) acid scrubbers to control TEA (a VOC) emissions will limit total VOC emissions from the six (6) Sutter core machines to 40.0 tons per year so that VOC emissions from all emission units installed in 1978 are limited to less than 100 tons per year, so that the requirements of 326 IAC 2-2 (PSD) do not apply.

- (e) The usage of VOC in the two (2) CB core machines, including all solvents other than resin or catalyst, shall be less than 21.14 tons per 12 consecutive month period with compliance determined at the end of each month.

- (f) The total resin usage for the two (2) CB core machines shall not exceed 578,160 pounds of resin per 12 consecutive month period, with compliance determined at the end of each month. Total catalyst usage for the two (2) CB core machines shall not exceed 88,458 pounds of VOC catalyst per 12 consecutive month period, with compliance determined at the end of each month.
- (g) The VOC emissions from resin usage in the two (2) CB core machines shall not exceed 0.05 pound per pound of resin.
- (h) The VOC emissions from catalyst usage in the two (2) CB core machines shall not exceed 0.1 pound per pound of catalyst after control.

This VOC usage limit for the two (2) CB core machines and the operation of the acid scrubber to control TEA (a VOC) emissions as required pursuant to 326 IAC 8-1-6 and condition D.3.2 will limit total VOC emissions from the two (2) CB core machines installed in 1994 to less than 40 tons per year so that the requirements of 326 IAC 2-2 (PSD) do not apply.

D.3.2 Volatile Organic Compounds (VOCs) [326 IAC 8-1-6]

Pursuant to Title V permit (T169-6598-00042), issued on June 11, 1999, and 326 IAC 8-1-6 (New Facilities, General Reduction Requirements), the Best Available Control Technology (BACT) for the two (2) CB core machines (SC-4) will be the operation of the acid scrubber at all times the core machines are in operation. The scrubber shall operate at an overall control efficiency of 90%.

D.3.3 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 the six (6) Sutter core machines and the two (2) CB core machines and their control devices.

Compliance Determination Requirements

D.3.4 Volatile Organic Compounds (VOC)

Compliance with the VOC content and usage limitations contained in Condition D.3.1(d) and (e) shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) by preparing or obtaining from the manufacturer the copies of the “as supplied” and “as applied” VOC data sheets. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

D.3.5 VOC Control

- (a) In order to comply with condition D.3.1, the six (6) acid scrubbers for TEA (a VOC) control shall be in operation and control emissions from the six (6) Sutter core machines at all times that the six (6) Sutter core machines are in operation.
- (b) In order to comply with conditions D.3.1 and D.3.2, the acid scrubber for TEA (a VOC) control shall be in operation and control emissions from the two (2) CB core machines at all times that the two (2) CB core machines are in operation.

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

D.3.6 Parametric Monitoring [40 CFR 64]

The Permittee shall record the pH of the liquid in the six (6) acid scrubbers used in conjunction with the Sutter core machines, at least once per day when the Sutter core machines are in operation. When for any one reading the pH of the liquid in the scrubbers is greater than 5.0 standard units or a pH established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pH reading that is greater than the above mentioned pH is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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

D.3.7 Parametric Monitoring

The Permittee shall record the pH of the liquid in the acid scrubber used in conjunction with the CB core machines, at least once per day when the CB core machines are in operation. When for any one reading, the pH of the liquid in the acid scrubber is greater than 5.0 standard units or a pH established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. A pH that is greater than the above mentioned value is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

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

D.3.8 Acid Scrubber Failure Detection

In the event that acid scrubber failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions). Failure to take response steps in accordance 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.3.9 Record Keeping Requirements

- (a) To document compliance with Conditions D.3.1(a) and D.3.1(f), the Permittee shall maintain records of the resin and catalyst usage for the six (6) Sutter core machines and the two (2) CB core machines for each month.
- (b) To document compliance with Condition D.3.1(d) and (e), the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained for (1) through (3) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.3.1(d) and (e).
 - (1) The amount and VOC content of each solvent other than resin or catalyst used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used;

- (2) The total VOC usage for each month; and
- (3) The weight of VOCs emitted for each compliance period.
- (c) To document compliance with Conditions D.3.6 and D.3.7, the Permittee shall maintain records once per day of the pH of the liquid in each of the six (6) acid scrubbers controlling the six (6) Sutter core machines and the one (1) acid scrubber controlling the two (2) CB core machines during normal operation.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.3.10 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.3.1(a), D.3.1(d), D.3.1(e), and D.3.1(f) shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their 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 D.4 FACILITY OPERATION CONDITIONS

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

Insignificant Activities:

- (a) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate of less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive lasting; pneumatic conveying; and woodworking operations:
 - (1) Twelve (12) dry grinders (BH-2) with two (2) dust collectors for particulate matter control; [326 IAC 6-3-2]
 - (2) Goff Blast # 1 with one (1) dust collector for particulate matter control, with a gas flow rate of 2,000 acfm and a design grain loading of less than 0.03 dscf; [326 IAC 6-3-2]
 - (3) Goff Blast # 2 with one (1) dust collector for particulate matter control, with a gas flow rate of 3,700 acfm and a design grain loading of less than 0.03 dscf; [326 IAC 6-3-2]
 - (4) Goff Blast # 3 with one (1) dust collector for particulate matter control, with a gas flow rate of 3,700 acfm and a design grain loading of less than 0.03 dscf; [326 IAC 6-3-2]
- (b) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6;
 - (1) One (1) cleaner with a remote solvent reservoir. [326 IAC 8-3-2]
- (c) Trimmers that do not produce fugitive emissions that are equipped with a dust collection or trim material recovery device such as a bag filter or cyclone; [326 IAC 6-3-2]

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

Process Weight Activities

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

D.4.1 Particulate [326 IAC 6-3-2]

- (a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the twelve (12) dry grinders (BH-2) shall not exceed 13.16 pounds per hour when operating at a process weight rate of 11,400 pounds per hour.

The pounds per hour limitation was calculated with the following equation:

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

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

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

- (1) Goff Blast # 1 with one (1) dust collector for particulate matter control, with a gas flow rate of 2,000 acfm and a design grain loading of less than 0.03 dscf;
- (2) Goff Blast # 2 with one (1) dust collector for particulate matter control, with a gas flow rate of 3,700 acfm and a design grain loading of less than 0.03 dscf;
- (3) Goff Blast # 3 with one (1) dust collector for particulate matter control, with a gas flow rate of 3,700 acfm and a design grain loading of less than 0.03 dscf; and
- (4) Trimmers that do not produce fugitive emissions that are equipped with a dust collection or trim material recovery device such as a bag filter or cyclone.

Compliance Determination Requirements

D.4.2 Particulate Control

In order to comply with condition D.4.1, the dust collectors and/or cyclones for particulate control shall be in operation and control emissions from the twelve (12) dry grinders, Goff Blast #1, #2, and #3 and the trimmers at all times that these units are in operation.

Cold Cleaning Degreaser Operations

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

D.4.3 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), for cold cleaning operations constructed after January 1, 1980, the Permittee shall:

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

PART 70 OPERATING PERMIT CERTIFICATION

Source Name: Hayes Lemmerz International – Wabash, Inc.
Source Address: 3837 West Mill Street Extended, Wabash, Indiana 46992
Mailing Address: 3837 West Mill Street Extended, Wabash, Indiana 46992
Part 70 Permit No.: T169-17972-00042

**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 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: Hayes Lemmerz International – Wabash, Inc.
Source Address: 3837 West Mill Street Extended, Wabash, Indiana 46992
Mailing Address: 3837 West Mill Street Extended, Wabash, Indiana 46992
Part 70 Permit No.: T169-17972-00042

This form consists of 2 pages

Page 1 of 2

- | |
|--|
| <input type="checkbox"/> This is an emergency as defined in 326 IAC 2-7-1(12) <ul style="list-style-type: none">C 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 Section); andC 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

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 DATA SECTION

Part 70 Quarterly Report

Source Name: Hayes Lemmerz International – Wabash, Inc.
Source Address: 3837 West Mill Street Extended, Wabash, Indiana 46992
Mailing Address: 3837 West Mill Street Extended, Wabash, Indiana 46992
Part 70 Permit No.: T169-17972-00042
Facility: two (2) reverberatory furnaces (S-1)
Parameter: PM and PM10
Limit: (a) The input of solid flux to the two (2) reverberatory furnaces shall not exceed 473,040 pounds per 12 consecutive month period, with compliance determined at the end of each month.
(b) The input of metal to the two (2) reverberatory furnaces shall not exceed 61,320 tons per 12 consecutive month period, with compliance determined at the end of each month.

YEAR:

Month	Two (2) Reverberatory Furnaces		Two (2) Reverberatory Furnaces		Two (2) Reverberatory Furnaces	
	Flux Usage This Month (lbs)	Metal Throughput This Month (tons)	Flux Usage Previous 11 Months (lbs)	Metal Throughput Previous 11 Months (tons)	12 Month Total Flux Usage (lbs)	12 Month Total Metal Throughput (tons)
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 DATA SECTION

Part 70 Quarterly Report

Source Name: Hayes Lemmerz International – Wabash, Inc.
Source Address: 3837 West Mill Street Extended, Wabash, Indiana 46992
Mailing Address: 3837 West Mill Street Extended, Wabash, Indiana 46992
Part 70 Permit No.: T169-17972-00042
Facility: crucible furnace (S-2)
Parameter: PM and PM10
Limit: (a) The input of solid flux to the crucible furnace shall not exceed 87,600 pounds per 12 consecutive month period, with compliance determined at the end of each month.
(b) The input of metal to the crucible furnace shall not exceed 10,950 tons per 12 consecutive month period, with compliance determined at the end of each month.

YEAR:

Month	Crucible Furnace		Crucible Furnace		Crucible Furnace	
	Flux Usage This Month (lbs)	Metal Throughput This Month (tons)	Flux Usage Previous 11 Months (lbs)	Metal Throughput Previous 11 Months (tons)	12 Month Total Flux Usage (lbs)	12 Month Total Metal Throughput (tons)
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 DATA SECTION

Part 70 Quarterly Report

Source Name: Hayes Lemmerz International – Wabash, Inc.
Source Address: 3837 West Mill Street Extended, Wabash, Indiana 46992
Mailing Address: 3837 West Mill Street Extended, Wabash, Indiana 46992
Part 70 Permit No.: T169-17972-00042
Facility: mold making and sand reclamation (SC-1)
Parameter: VOC
Limit: The usage of VOC, including mold release agent and cleaning solvents in the mold making machine of the mold making and sand reclamation operation (SC-1) shall not exceed 12.45 tons per 12 consecutive month period with compliance determined at the end of each month;

YEAR:

Month	Column 1	Column 2	Column 1 + Column 2
	VOC Usage This Month (tons)	VOC Usage Previous 11 Months (tons)	12 Month Total VOC Usage (tons)
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 DATA SECTION

Part 70 Quarterly Report

Source Name: Hayes Lemmerz International – Wabash, Inc.
Source Address: 3837 West Mill Street Extended, Wabash, Indiana 46992
Mailing Address: 3837 West Mill Street Extended, Wabash, Indiana 46992
Part 70 Permit No.: T169-17972-00042
Facility: mold making and sand reclamation (SC-1)
Parameter: VOC
Limit: The throughput of metal to the mold making and sand reclamation operation (SC-1) shall not exceed 99,776 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

YEAR:

Month	Column 1	Column 2	Column 1 + Column 2
	Metal Throughput This Month (tons)	Metal Throughput Previous 11 Months (tons)	12 Month Total Metal Throughput (tons)
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 DATA SECTION**

Part 70 Quarterly Report

Source Name: Hayes Lemmerz International – Wabash, Inc.
Source Address: 3837 West Mill Street Extended, Wabash, Indiana 46992
Mailing Address: 3837 West Mill Street Extended, Wabash, Indiana 46992
Part 70 Permit No.: T169-17972-00042
Facility: shakeout and vibrating dump conveyor (SC-2)
Parameter: VOC
Limit: The throughput of metal to the shakeout and vibrating dump conveyor (SC-2) shall not exceed 75,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

YEAR:

Month	Column 1	Column 2	Column 1 + Column 2
	Metal Throughput This Month (tons)	Metal Throughput Previous 11 Months (tons)	12 Month Total Metal Throughput (tons)
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 DATA SECTION**

Part 70 Quarterly Report

Source Name: Hayes Lemmerz International – Wabash, Inc.
Source Address: 3837 West Mill Street Extended, Wabash, Indiana 46992
Mailing Address: 3837 West Mill Street Extended, Wabash, Indiana 46992
Part 70 Permit No.: T169-17972-00042
Facility: knockout operation (BH-1)
Parameter: VOC
Limit: The throughput of sand to the knockout operation (BH-1) shall not exceed 75,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

YEAR:

Month	Column 1	Column 2	Column 1 + Column 2
	Sand Throughput This Month (tons)	Sand Throughput Previous 11 Months (tons)	12 Month Total Sand Throughput (tons)
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 DATA SECTION**

Part 70 Quarterly Report

Source Name: Hayes Lemmerz International – Wabash, Inc.
Source Address: 3837 West Mill Street Extended, Wabash, Indiana 46992
Mailing Address: 3837 West Mill Street Extended, Wabash, Indiana 46992
Part 70 Permit No.: T169-17972-00042
Facility: pouring operation (F-1)
Parameter: VOC
Limit: The throughput of metal to the pouring operation (F-1) shall not exceed 99,776 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

YEAR:

Month	Column 1	Column 2	Column 1 + Column 2
	Metal Throughput This Month (tons)	Metal Throughput Previous 11 Months (tons)	12 Month Total Metal Throughput (tons)
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 DATA SECTION

Part 70 Quarterly Report

Source Name: Hayes Lemmerz International – Wabash, Inc.
Source Address: 3837 West Mill Street Extended, Wabash, Indiana 46992
Mailing Address: 3837 West Mill Street Extended, Wabash, Indiana 46992
Part 70 Permit No.: T169-17972-00042
Facility: pouring (F-1), cooling, and shakeout (SC-2) operations
Parameter: CO
Limit: The throughput of metal to the pouring, cooling, and shakeout operations shall not exceed 75,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

YEAR:

Month	Column 1	Column 2	Column 1 + Column 2
	Metal Throughput This Month (tons)	Metal Throughput Previous 11 Months (tons)	12 Month Total Metal Throughput (tons)
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 DATA SECTION

Part 70 Quarterly Report

Source Name: Hayes Lemmerz International – Wabash, Inc.
Source Address: 3837 West Mill Street Extended, Wabash, Indiana 46992
Mailing Address: 3837 West Mill Street Extended, Wabash, Indiana 46992
Part 70 Permit No.: T169-17972-00042
Facility: six (6) Sutter core machines
Parameter: VOC
Limit: The total resin usage for the six (6) Sutter core machines shall not exceed 600,000 pounds of resin per 12 consecutive month period, with compliance determined at the end of each month. Total catalyst usage for the six (6) Sutter core machines shall not exceed 100,000 pounds of VOC catalyst per 12 consecutive month period, with compliance determined at the end of each month.

YEAR:

Month	Column 1a	Column 1b	Column 2a	Column 2b	Column 1a + Column 2a	Column 1b + Column 2b
	Resin Usage This Month (tons)	Catalyst Usage This Month (tons)	Resin Usage Previous 11 Months (tons)	Catalyst Usage Previous 11 Months (tons)	12 Month Total Resin Usage (tons)	12 Month Total Catalyst Usage (tons)
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 DATA SECTION**

Part 70 Quarterly Report

Source Name: Hayes Lemmerz International – Wabash, Inc.
Source Address: 3837 West Mill Street Extended, Wabash, Indiana 46992
Mailing Address: 3837 West Mill Street Extended, Wabash, Indiana 46992
Part 70 Permit No.: T169-17972-00042
Facility: six (6) Sutter core machines
Parameter: VOC
Limit: The usage of VOC, including all solvents other than resin or catalyst, shall be less than 20.0 tons per 12 consecutive month period with compliance determined at the end of each month.

YEAR:

Month	Column 1	Column 2	Column 1 + Column 2
	VOC Usage This Month (tons)	VOC Usage Previous 11 Months (tons)	12 Month Total VOC Usage (tons)
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 DATA SECTION**

Part 70 Quarterly Report

Source Name: Hayes Lemmerz International – Wabash, Inc.
Source Address: 3837 West Mill Street Extended, Wabash, Indiana 46992
Mailing Address: 3837 West Mill Street Extended, Wabash, Indiana 46992
Part 70 Permit No.: T169-17972-00042
Facility: two (2) CB core machines
Parameter: VOC
Limit: The usage of VOC, including all solvents other than resin or catalyst, shall be less than 21.14 tons per 12 consecutive month period with compliance determined at the end of each month.

YEAR:

Month	Column 1	Column 2	Column 1 + Column 2
	VOC Usage This Month (tons)	VOC Usage Previous 11 Months (tons)	12 Month Total VOC Usage (tons)
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 DATA SECTION

Part 70 Quarterly Report

Source Name: Hayes Lemmerz International – Wabash, Inc.
Source Address: 3837 West Mill Street Extended, Wabash, Indiana 46992
Mailing Address: 3837 West Mill Street Extended, Wabash, Indiana 46992
Part 70 Permit No.: T169-17972-00042
Facility: two (2) CB core machines
Parameter: VOC
Limit: The total resin usage for the two (2) CB core machines shall not exceed 578,160 pounds of resin per 12 consecutive month period, with compliance determined at the end of each month. Total catalyst usage for the two (2) CB core machines shall not exceed 88,458 pounds of VOC catalyst per 12 consecutive month period, with compliance determined at the end of each month.

YEAR:

Month	Column 1a	Column 1b	Column 2a	Column 2b	Column 1a + Column 2a	Column 1b + Column 2b
	Resin Usage This Month (tons)	Catalyst Usage This Month (tons)	Resin Usage Previous 11 Months (tons)	Catalyst Usage Previous 11 Months (tons)	12 Month Total Resin Usage (tons)	12 Month Total Catalyst Usage (tons)
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 DATA SECTION**

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

Source Name: Hayes Lemmerz International – Wabash, Inc.
Source Address: 3837 West Mill Street Extended, Wabash, Indiana 46992
Mailing Address: 3837 West Mill Street Extended, Wabash, Indiana 46992
Part 70 Permit No.: T169-17972-00042

Months: _____ to _____ Year: _____

Page 1 of 2

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

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

Form Completed By:

Title/Position:

Date:

Phone:

Attach a signed certification to complete this report.

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

Technical Support Document (TSD) for a Part 70 Operating Permit Renewal

Source Background and Description

Source Name:	Hayes Lemmerz International – Wabash, Inc.
Source Location:	3837 West Mill Street Extended, Wabash, IN 46992
County:	Wabash
SIC Code:	3714
Operation Permit No.:	169-6598-00042
Operation Permit Issuance Date:	June 11, 1999
Permit Renewal No.:	169-17972-00042
Permit Reviewer:	Trish Earls/EVP

The Office of Air Quality (OAQ) has reviewed a Part 70 Operating Permit Renewal application from Hayes Lemmerz International – Wabash, Inc. relating to the operation of an aluminum production operation that manufactures aluminum motor vehicle parts.

Permitted Emission Units and Pollution Control Equipment

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

- (a) One (1) melting and combustion operation (S-1), constructed in 1992, consisting of two (2) reverberatory furnaces each processing aluminum at a rate of 7.0 tons per hour, using a maximum of 54 pounds of solid flux per hour, each rated at 39.0 million British thermal units (MMBtu) per hour, combusting natural gas, and exhausting to two (2) stacks (Stacks S-1A and S-1B). These furnaces do not melt simultaneously;
- (b) One (1) melting and combustion operation (S-2), constructed in 1992, consisting of one (1) crucible furnace processing aluminum at a rate of 1.25 tons per hour, using a maximum of 10 pounds of solid flux per hour, rated at 7.0 MMBtu per hour, combusting natural gas, exhausting at one (1) stack (Stack S-2A);
- (c) One (1) mold making and sand reclamation operation (SC-1), constructed in 1978, with a maximum metal throughput of 11.39 tons per hour and a maximum sand throughput of 180 tons per hour with a cyclone wet scrubber (East Cyclone Wet Scrubber) for particulate matter control and exhausting to one (1) stack (Stack SC-1A);
- (d) One (1) shakeout and vibrating dump conveyor (SC-2), constructed in 1978, with a maximum metal throughput of 11.39 tons per hour with a cyclone wet scrubber (West Cyclone Wet Scrubber) for particulate matter control and exhausting to one (1) stack (Stack SC-2A);
- (e) One (1) knockout operation (BH-1), constructed in 1978, with a maximum sand throughput of 13.14 tons per hour, including a rotary sand separator with a baghouse for particulate matter control, exhausting to one (1) stack (Stack BH-1A);
- (f) One (1) pouring operation (F-1), constructed in 1978, utilizing molten aluminum from the melting operations for a process rate of 11.39 tons per hour, exhausting to the general plant ventilation;

- (g) Six (6) Sutter core machines (SC-3), each constructed in 1978, each capable of producing a maximum of 6,300 pounds of sand cores per hour, using a phenolic urethane cold box core making process, using a maximum of 3.2 pounds of TEA catalyst per ton of sand cores, with six (6) acid scrubbers for VOC control and exhausting to six (6) stacks (Stacks SC-3A, SC-3B, SC-3C, SC-3D, SC-3E, and SC-3F);
- (h) Two (2) CB core machines (SC-4), each constructed in 1994, each capable of producing a maximum of 3,300 pounds of sand cores per hour, using a phenolic urethane cold box core making process, using a maximum of 3.06 pounds of TEA catalyst per ton of sand cores, with one (1) acid scrubber for VOC control and exhausting to one (1) stack (Stack SC-4A);
- (i) One (1) manual prototype core making operation (SC-5), constructed in 1978, with a maximum capacity of processing 200 pounds of sand per hour, using a phenolic urethane no bake core making process, using a maximum of 1.5 pounds of VOC catalyst per ton of sand, having no emission control equipment and exhausting to the general plant ventilation;

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted emission units operating at this source during this review process.

Emission Units and Pollution Control Equipment Removed From This Source

The following permitted emission units have been removed from this source:

- (a) One (1) mechanical blasting operation (BH-3) with a process rate of 32.7 tons per hour that is a combination of the steel shot throw rate (27 tons per hour) and the aluminum casting throughput (5.7 tons per hour), with a dust collector for particulate control.

Insignificant Activities

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

- (a) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate of less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations:
 - (1) Twelve (12) liquid cooled saws (BH-2) with no air pollution control equipment;
 - (2) Twelve (12) dry grinders (BH-2) with two (2) dust collectors for particulate matter control;
 - (3) Goff Blast # 1 with one (1) dust collector for particulate matter control, with a gas flow rate of 2,000 acfm and a design grain loading of less than 0.03 dscf;
 - (4) Goff Blast # 2 with one (1) dust collector for particulate matter control, with a gas flow rate of 3,700 acfm and a design grain loading of less than 0.03 dscf;
 - (5) Goff Blast # 3 with one (1) dust collector for particulate matter control, with a gas flow rate of 3,700 acfm and a design grain loading of less than 0.03 dscf;
- (b) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million British thermal units (Btu) per hour (F-6):
 - (1) Nine (9) air make-up units each rated at 5.0 MMBtu per hour;
 - (2) One (1) sand dryer rated at 4.0 MMBtu per hour;
 - (3) One (1) core drying oven for core coating operation rated at 0.3 MMBtu per hour;
 - (4) Semi-permanent molding melting furnace rated at 2.6 MMBtu per hour;

- (c) Propane or liquefied petroleum gas, or butane-fired combustion source with heat input equal to or less than six million (6,000,000) Btu per hour;
- (d) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons;
 - (1) One (1) 300 gallon gasoline tank.
- (e) The following VOC and HAP storage containers:
 - (1) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons.
 - (2) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.
- (f) Refractory storage not requiring air pollution control equipment;
- (g) Application of oils, greases, lubricants or other nonvolatile materials applied as temporary protective coatings;
- (h) Machining where an aqueous cutting coolant continuously floods the machining interface;
 - (1) Four (4) liquid cooled wet machine lines and machine washing operations, including wet milling, tapping, and drilling (F-5).
- (i) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6;
 - (1) One (1) cleaner with a remote solvent reservoir.
- (j) Cleaners and solvents characterized as follows:
 - (a) having a vapor pressure equal to or less than 2 kPa; 15 mm Hg; or 0.3 psi measured at 38 degrees C (100°F) or;
 - (b) having a vapor pressure equal to or less than 0.7 kPa; 5 mm Hg; or 0.1 psi measured at 20 degrees C (68°F); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.
- (k) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment;
- (l) Closed loop heating and cooling systems;
- (m) Any operation using aqueous solutions containing less than 1% by weight of VOCs excluding HAPs;
- (n) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment;
- (o) Heat exchanger cleaning and repair;
- (p) Trimmers that do not produce fugitive emissions that are equipped with a dust collection or trim material recovery device such as a bag filter or cyclone;
- (q) Paved and unpaved roads and parking lots with public access (F-7):
- (r) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.

- (s) Mold release agents using low volatile products (vapor pressure less than or equal to 2 kilopascals measured at 38 degrees C).
- (t) Activities with emissions equal to or less than the insignificant activity thresholds:
 - (1) Core coating and drying operation;
 - (2) Semi-Permanent Molding Turntable, with a maximum capacity of 0.5 ton of aluminum per hour;
 - (3) Ten (10) knockout hammers with particulate matter emissions less than 5 pounds per hour or 25 pounds per day. (Part of knockout operation)

Existing Approvals

The source has constructed or has been operating under the following previous approvals:

- (a) Title V Permit T169-6598-00042, issued on June 11, 1999;
- (b) First Administrative Amendment No. 169-11224-00042, issued on September 30, 1999; and
- (c) R169-13521-00042, issued on January 24, 2002.

All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either incorporated as originally stated, revised, or deleted by this permit. All previous registrations and permits are superseded by this permit.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the Part 70 permit be approved. This recommendation is based on the following facts and conditions:

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

An administratively complete Part 70 permit renewal application for the purposes of this review was received on September 9, 2003.

There was no notice of completeness letter mailed to the Permittee.

Emission Calculations

See Appendix A of this document for detailed emission calculations (12 pages).

Potential to Emit of the Source

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

The source was issued a Part 70 Operating Permit on June 11, 1999. The table below summarizes the potential to emit, reflecting all limits, of the emission units. Any control equipment is considered enforceable only after issuance of the original Part 70 operating Permit and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

Process/emission unit	Potential to Emit (tons/year)							
	PM	PM-10	SO ₂	VOC	CO	NO _x	Single HAP	Total HAPs
Two (2) Reverberatory Furnaces (S-1) Melting, Fluxing and Combustion ⁽¹⁾ 1992	47.13	49.08	27.79	8.01	28.70	57.46	7.02	10.75
Crucible Furnace (S-2) Melting, Fluxing and Combustion ⁽¹⁾ 1992	8.36	8.53	4.95	1.27	2.58	7.23	1.30	1.94
Mold Making and Sand Reclamation (SC-1) ⁽²⁾ 1978	12.22	11.17	0.00	15.44	0.00	0.00	0.00	0.00
Shakeout and Vibrating Dump Conveyor (SC-2) ⁽³⁾⁽⁶⁾ 1978	8.40	5.88	0.00	17.63	99.9	0.00	0.00	0.00
Pouring (F-1) ⁽⁶⁾ 1978	47.24	46.89	1.00	6.98		0.50	3.02	6.98
Sutter Core Machines (SC-3) ⁽⁴⁾ 1978	0.00	0.00	0.00	40.00	0.00	0.00	5.00	5.83
CB Core Machines (SC-4) ⁽⁵⁾ 1994	0.00	0.00	0.00	39.90	0.00	0.00	4.42	5.21
Prototype Core Machine (SC-5) 1978	0.00	0.00	0.00	1.45	0.00	0.00	0.07	0.15
Knockout (BH-1) 1978	1.00	1.00	0.00	16.50	0.00	0.00	1.13	1.88
Sawing and Grinding (BH-2) 1978	0.42	0.04	0.00	0.31	0.00	0.00	0.00	0.00
Machining (F-5) 1990's	0.00	0.00	0.00	3.43	0.00	0.00	0.00	0.00
Insig. Combustion Units (F-6) 1980's and 1990's	0.43	1.73	0.14	1.25	19.10	22.73	0.41	0.43
Roadways (F-7) 1978	8.55	8.55	0.00	0.00	0.00	0.00	0.00	0.00
Total PTE	133.75	132.87	33.88	152.17	150.28	87.92	9.42	33.17

- (1) PM and PM10 emissions from melting and fluxing in the reverberatory furnaces and the crucible furnace are based on a stack test emission factor of 1.51 pounds PM/PM10 per ton of metal throughput. Since this emission factor was obtained from the test run performed during fluxing in the furnace, flux usage must be limited to the usage rate during the test run of 54 pounds per hour. This will ensure that PM and PM10 emissions from the reverberatory furnaces and the crucible furnace do not exceed 100 tons per year so that the requirements of 326 IAC 2-2 (PSD) do not apply.
- (2) VOC emissions from the mold making and sand reclamation operation (SC-1) are limited to 15.44 tons per year to render 326 IAC 2-2 (PSD) not applicable.
- (3) VOC emissions from the shakeout and vibrating dump conveyor (SC-2) are limited to 17.63 tons per year to render 326 IAC 2-2 (PSD) not applicable.
- (4) VOC emissions from the Sutter core machines (SC-3) are limited to 40.0 tons per year to render 326 IAC 2-2 (PSD) not applicable.
- (5) VOC emissions from the two (2) CB core machines (SC-4) are limited to less than 40 tons per year to render 326 IAC 2-2 (PSD) not applicable.
- (6) CO emissions from the pouring (F-1), cooling, and shakeout (SC-2) operations are limited to 99.9 tons per year to render 326 IAC 2-2 (PSD) not applicable.

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of VOC, PM10, and CO is equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is equal to or greater than twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (c) Fugitive Emissions
Since this type of operation is one of the twenty-eight (28) listed source categories under 326 IAC 2-2, the fugitive emissions are counted toward determination of PSD and Emission Offset applicability.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 2003 OAQ emission data.

Pollutant	Actual Emissions (tons/year)
PM2.5	3.0
PM-10	5.0
SO ₂	6.0
VOC	47.0
CO	6.0
NO _x	12.0
HAP (Lead)	0.0

County Attainment Status

The source is located in Wabash County.

Pollutant	Status
PM2.5	Attainment
PM-10	Attainment
SO ₂	Attainment
NO ₂	Attainment
8-hour Ozone	Attainment
CO	Attainment
Lead	Attainment

- (a) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to ozone. Wabash County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.

- (b) Wabash County has been classified as unclassifiable or attainment for PM_{2.5}. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM 2.5 emissions. Therefore, until the U.S.EPA adopts specific provisions for PSD review for PM_{2.5} emissions, it has directed states to regulate PM₁₀ emissions as surrogate for PM_{2.5} emissions.
- (c) Wabash County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.

Part 70 Permit Conditions

This source is subject to the requirements of 326 IAC 2-7, pursuant to which the source has to meet the following:

- (a) Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance of Part 70 permits.
- (b) Monitoring and related record keeping requirements which assure that all reasonable information is provided to evaluate continuous compliance with the applicable requirements.

Federal Rule Applicability

- (a) This source does involve a pollutant-specific emissions unit (Sutter Core Machines) as defined in 40 CFR 64.1 for volatile organic compounds:
 - (1) with the potential to emit before controls equal to or greater than the major source threshold for VOC,
 - (2) that is subject to an emission limitation or standard for VOC, and
 - (3) uses a control device as defined in 40 CFR Part 64.1 to comply with that emission limitation or standard.

Therefore, the requirements of 40 CFR Part 64, Compliance Assurance Monitoring, are applicable to the Sutter core machines (SC-3).

- (b) The pollutant-specific emission unit is not a “large unit” as described in 40 CFR 64.5. Therefore, the Permittee has submitted a CAM plan pursuant to 40 CFR 64 as part of the Part 70 renewal application. The compliance monitoring requirements applicable to the Sutter core machines using six (6) acid scrubbers for TEA (a VOC) emissions control, which shall satisfy the 40 CFR 64 Compliance Assurance Monitoring requirements, are as follows:

- (1) The Permittee shall record the pH of the liquid in the six (6) acid scrubbers used in conjunction with the Sutter core machines, at least once per day when the Sutter core machines are in operation. When for any one reading the pH of the liquid in the scrubbers is greater than 5.0 standard units or a pH established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pH reading that is greater than the above mentioned pH is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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

- (2) In the event that acid scrubber failure has been observed:

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

- (c) This source does involve pollutant-specific emissions units (Mold Making and Sand Reclamation (SC-1), Shakeout and Vibrating Dump Conveyor (SC-2), and Knockout (BH-1)) as defined in 40 CFR 64.1 for PM10:

- (1) with the potential to emit before controls equal to or greater than the major source threshold for PM10,
- (2) that is subject to an emission limitation or standard for PM10, and
- (3) uses a control device as defined in 40 CFR Part 64.1 to comply with that emission limitation or standard.

Therefore, the requirements of 40 CFR Part 64, Compliance Assurance Monitoring, are applicable to the Mold Making and Sand Reclamation (SC-1), Shakeout and Vibrating Dump Conveyor (SC-2), and Knockout (BH-1).

- (d) The pollutant-specific emission units are not "large units" as described in 40 CFR 64.5. Therefore, the Permittee has submitted CAM plans pursuant to 40 CFR 64 as part of the Part 70 renewal application. The compliance monitoring requirements applicable to the Mold Making and Sand Reclamation using a cyclone wet scrubber (East Cyclone Wet Scrubber) for particulate emissions control, which shall satisfy the 40 CFR 64 Compliance Assurance Monitoring requirements, are as follows:

- (1) Visible emission notations of the cyclone wet scrubber stack exhaust (SC-1A) shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (2) 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.

- (3) 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.
- (4) 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.
- (5) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.
- (6) The Permittee shall record the liquid flow rate and pressure drop across the cyclone wet scrubber used in conjunction with the mold making and sand reclamation operation, at least once per day when the mold making and sand reclamation is in operation. When for any one reading, the flow rate of the cyclone wet scrubber is less than 50 gallons per minute or a range established during the latest stack test, or the pressure drop across the cyclone wet scrubber is outside the normal range of 2.0 to 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. A flow rate that is less than 50 gallons per minute or a pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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

- (7) In the event that cyclone wet scrubber failure has been observed:
 - (A) Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions). Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.
- (e) The compliance monitoring requirements applicable to the Shakeout and Vibrating Dump Conveyor (SC-2) using a cyclone wet scrubber (West Cyclone Wet Scrubber) for particulate emissions control, which shall satisfy the 40 CFR 64 Compliance Assurance Monitoring requirements, are as follows:
 - (1) Visible emission notations of the cyclone wet scrubber stack exhaust (SC-2A) shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
 - (2) 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.

- (3) 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.
- (4) 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.
- (5) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.
- (6) The Permittee shall record the liquid flow rate and pressure drop across the cyclone wet scrubber used in conjunction with the Shakeout and Vibrating Dump Conveyor (SC-2), at least once per day when the Shakeout and Vibrating Dump Conveyor (SC-2) is in operation. When for any one reading, the flow rate of the cyclone wet scrubber is less than 50 gallons per minute or a range established during the latest stack test, or the pressure drop across the cyclone wet scrubber is outside the normal range of 2.0 to 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A flow rate that is less than 50 gallons per minute or a pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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

- (7) In the event that cyclone wet scrubber failure has been observed:
 - (A) Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions). Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.
- (f) The compliance monitoring requirements applicable to the Knockout operation (BH-1) using a baghouse (BH-1A) for particulate emissions control, which shall satisfy the 40 CFR 64 Compliance Assurance Monitoring requirements, are as follows:
 - (1) Visible emission notations of the knockout machines and the rotary sand separator stack exhaust shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
 - (2) 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.

- (3) 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.
- (4) 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.
- (5) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.
- (6) The Permittee shall record the pressure drop across the baghouse used in conjunction with the knockout and rotary sand separator process, at least once per day when the knockout and rotary sand separator process is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 0.5 to 5.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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

- (7) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
- (8) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the emissions unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

- (g) The requirements of the New Source Performance Standard (NSPS), 326 IAC 12, (40 CFR 60.191, Subpart S (Primary Aluminum Reduction) are not included in the permit because the source does not perform primary aluminum reduction as defined in 40 CFR 60.191. This source is a secondary aluminum foundry plant.

- (h) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Secondary Aluminum Production, 40 CFR 63.1500 through 63.1519, Subpart RRR, are not included in the permit because this source is not a secondary aluminum production facility as defined in 40 CFR 63.1503. Pursuant to 40 CFR 63.1503, aluminum die casting facilities, aluminum foundries, and aluminum extrusion facilities are not considered to be secondary aluminum production facilities if the only materials they melt are clean charge, customer returns, or internal scrap, and if they do not operate sweat furnaces, thermal chip dryers, or scrap dryers/delacquering kilns/decoating kilns. This source only melts clean charge, customer returns, or internal scrap and does not operate sweat furnaces, thermal chip dryers, or scrap dryers/delacquering kilns/decoating kilns, therefore, it is not a secondary aluminum production facility as defined in the rule.
- (i) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP), 326 IAC 20, (40 CFR 63.460 through 63.468, Subpart T) are not included in the permit for the degreasing operation, an insignificant activity, because this unit does not use a halogenated HAP cleaning solvent.

State Rule Applicability – Entire Source

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

This source, originally constructed in 1978, is one of the twenty-eight (28) listed source categories under 326 IAC 2-2 because it is a secondary metal production plant. The major source threshold for sources in one of the twenty-eight (28) listed source categories under this rule is 100 tons per year of any regulated NSR pollutant. This source is an existing major PSD source but is not subject to the requirements of 326 IAC 2-2 (PSD) for the reasons discussed below.

In the original Title V permit (T169-6598-00042), issued on June 11, 1999, this source was subject to VOC emission limits for the mold making and sand reclamation operation (SC-1), constructed in 1978, of 16.7 tons per year and for the Sutter core machines (SC-3), constructed in 1978, of 30.0 tons per year. Because potential emissions from the emission units constructed in 1978 were greater than the PSD major source threshold of 100 tons per year, and actual emissions were less than 100 tons per year, these limits were included in the original Title V permit to ensure that potential VOC emissions from the original equipment at the source in 1978 are limited to less than 100 tons per year to render the requirements of this rule not applicable to the units installed in 1978. However, in the original Title V permit, an incorrect emission factor was used to calculate potential emissions from the Knockout operation (BH-1) also installed in 1978. The emission calculations for this operation have been corrected in this renewal using the correct emission factor resulting in higher VOC emissions from the Knockout operation (BH-1). Therefore, the existing VOC limits on the mold making and sand reclamation operation and the Sutter core machines have been revised to account for the additional VOC emissions from the Knockout operation. The VOC emissions from the mold making and sand reclamation operation (SC-1), the shakeout and vibrating dump conveyor (SC-2), the knockout operation (BH-1), the pouring operation (F-1), and the VOC emissions from the Sutter core machines are now limited as follows such that the potential VOC emissions from the original equipment at the source in 1978 are limited to less than 100 tons per year:

- (a) The usage of VOC, including mold release agent and cleaning solvents in the mold making machine of the mold making and sand reclamation operation (SC-1) shall not exceed 12.45 tons per 12 consecutive month period with compliance determined at the end of each month;
- (b) VOC emissions from the mold making and sand reclamation operation (SC-1), other than those from mold release agent and cleaning solvent usage, shall not exceed 0.06 pounds per ton of metal throughput;

- (c) The throughput of metal to the mold making and sand reclamation operation shall not exceed 99,776 tons per twelve (12) consecutive month period, with compliance determined at the end of each month;
- (d) VOC emissions from the shakeout and vibrating dump conveyor (SC-2) shall not exceed 0.47 pound per ton of metal throughput;
- (e) The throughput of metal to the shakeout and vibrating dump conveyor (SC-2) shall not exceed 75,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month;
- (f) VOC emissions from the knockout operation (BH-1) shall not exceed 0.44 pounds per ton of sand throughput;
- (g) The throughput of sand to the knockout operation (BH-1) shall not exceed 75,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month;
- (h) VOC emissions from the pouring operation (F-1) shall not exceed 0.14 pound per ton of metal throughput;
- (i) The throughput of metal to the pouring operation (F-1) shall not exceed 99,776 tons per twelve (12) consecutive month period, with compliance determined at the end of each month;
- (j) The total resin usage for the six (6) Sutter core machines shall not exceed 600,000 pounds of resin per 12 consecutive month period, with compliance determined at the end of each month. Total catalyst usage for the six (6) Sutter core machines shall not exceed 100,000 pounds of VOC catalyst per 12 consecutive month period, with compliance determined at the end of each month.
- (k) The VOC emissions from resin usage in the six (6) Sutter core machines shall not exceed 0.05 pound per pound of resin.
- (l) The VOC emissions from catalyst usage in the six (6) Sutter core machines shall not exceed 0.1 pound per pound of catalyst after control.
- (m) The six (6) acid scrubbers for TEA (a VOC) control shall be in operation and control emissions from the six (6) Sutter core machines at all times that the six (6) Sutter core machines are in operation.
- (n) The usage of VOC in the six (6) Sutter core machines, including all solvents other than resin or catalyst, shall be less than 20.0 tons per 12 consecutive month period with compliance determined at the end of each month.

Also, controlled PM and PM10 emissions from the equipment installed in 1978 is less than 100 tons per year, making the source a minor PSD source in 1978. However, since potential and allowable PM and PM10 emissions from the equipment installed in 1978 are greater than 100 tons per year, limits must be included in the Title V renewal to ensure that the PM and PM10 emissions are limited to less than 100 tons per year so that the requirements of this rule do not apply. These limits are as follows:

- (a) PM and PM10 emissions from mold making and sand reclamation (SC-1) shall not exceed 5.55 and 5.98 pounds per hour, respectively;

- (b) PM and PM10 emissions from the shakeout and vibrating dump conveyor (SC-2) shall not exceed 5.05 and 4.48 pounds per hour, respectively;
- (c) PM and PM10 emissions from the knockout operation (BH-1) shall not exceed 1.4 and 1.64 pounds per hour, respectively; and
- (d) PM and PM10 emissions from the pouring/casting operation (F-1) shall not exceed 10.8 and 10.71 pounds per hour, respectively.

Since issuance of the original Title V permit (T169-6598-00042), issued on June 11, 1999, it has been determined by IDEM, OAQ that the pouring, cooling, and shakeout operations are sources of CO emissions that were not previously identified. Therefore, in order to ensure that CO emissions from the equipment installed in 1978 are less than 100 tons per year so that the requirements of PSD do not apply, CO emissions from the pouring, cooling, and shakeout operations are limited as follows:

- (a) Total CO emissions from pouring (F-1), cooling, and shakeout (SC-2) operations shall not exceed 2.664 pound per ton of metal throughput;
- (b) The throughput of metal to the pouring, cooling, and shakeout operations shall not exceed 75,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Since the source was an existing minor PSD source, the installation of the reverberatory melting and combustion operation (S-1) and the crucible furnace melting and combustion operation (S-2) in 1992, was a minor modification to an existing minor PSD source since potential PM and PM10 emissions were less than 100 tons per year. At that time the source became a major PSD source.

Potential VOC emissions from the CB core machines (SC-4), constructed in 1994, are greater than 40.0 tons per year. However, because actual emissions from the CB core machines constructed in 1994 were less than the PSD major source threshold of 40 tons per year, the limits listed below in addition to the requirement to operate the acid scrubber to control TEA (a VOC) emissions from the CB core machines have been included in this Title V permit renewal to ensure that potential VOC emissions from the CB core machines are limited to less than 40 tons per year to render the requirements of this rule not applicable. Therefore, the installation of the CB core machines (SC-4) in 1994 was a minor modification to an existing major source.

- (a) The usage of VOC in the two (2) CB core machines, including all solvents other than resin or catalyst, shall be less than 21.14 tons per 12 consecutive month period with compliance determined at the end of each month;
- (b) The total resin usage for the two (2) CB core machines shall not exceed 578,160 pounds of resin per 12 consecutive month period, with compliance determined at the end of each month. Total catalyst usage for the two (2) CB core machines shall not exceed 88,458 pounds of VOC catalyst per 12 consecutive month period, with compliance determined at the end of each month.
- (c) The VOC emissions from resin usage in the two (2) CB core machines shall not exceed 0.05 pound per pound of resin.
- (d) The VOC emissions from catalyst usage in the two (2) CB core machines shall not exceed 0.1 pound per pound of catalyst after control.

- (e) The acid scrubber for TEA (a VOC) control shall be in operation and control emissions from the two (2) CB core machines at all times that the two (2) CB core machines are in operation.

Although the source is now a major PSD source, all of the above mentioned modifications to the source were minor PSD modifications and the requirements of 326 IAC 2-2 (PSD) do not apply.

326 IAC 2-6 (Emission Reporting)

Since this source is required to have an operating permit under 326 IAC 2-7, Part 70 Permit Program, this source is subject to 326 IAC 2-6 (Emission Reporting). In accordance with the compliance schedule in 326 IAC 2-6-3, an emission statement must be submitted triennially by July 1 beginning in 2007 and every 3 years after. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

326 IAC 5-1 (Opacity Limitations)

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

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

326 IAC 6-4 (Fugitive Dust Emissions)

This source is subject to 326 IAC 6-4 for fugitive dust emissions. Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions), fugitive dust shall not be visible crossing the boundary or property line of a source. Observances of visible emissions crossing property lines may be refuted by factual data expressed in 326 IAC 6-4-2 (1), (2), or (3).

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

Pursuant to 326 IAC 2-4.1-1 (New Source Toxics Control), any new process or production unit, which in and of itself emits or has the potential to emit (PTE) 10 tons per year of any HAP or 25 tons per year of any combination of HAPs, must be controlled using technologies consistent with Maximum Achievable Control Technology (MACT). Since all of the facilities at this source have been constructed and/or permitted prior to July 27, 1997, the requirements of 326 IAC 2-4.1-1 do not apply.

State Rule Applicability – Individual Facilities

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

The particulate from the facilities listed below shall be limited as follows:

Emission Unit ID	Process Weight Rate, tons/hr	Allowable Particulate Emissions, lb/hr	Potential Particulate Emissions, lb/hr	Will Comply?
Reverberatory Furnaces (S-1)	7.0	15.10	10.76	Y
Crucible Furnace (S-2)	1.25	4.76	1.91	Y
Mold Making and Sand Reclamation (SC-1)	11.39	20.92	2.79 (controlled)	Y
Shakeout and Vibrating Dump Conveyor (SC-2)	11.39	20.92	2.55 (controlled)	Y

Emission Unit ID	Process Weight Rate, tons/hr	Allowable Particulate Emissions, lb/hr	Potential Particulate Emissions, lb/hr	Will Comply?
Knockout (BH-1) including knockout hammers	13.14	23.03	0.35 (controlled)	Y
Twelve (12) dry grinders (BH-2)	5.7	13.16	0.10 (controlled)	Y
Pouring (F-1)	11.39	20.92	10.79	Y

These limits were based on the following:

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

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

The cyclone wet scrubbers (East and West Cyclone Wet Scrubbers) shall be in operation at all times the Mold Making and Sand Reclamation (SC-1) and Shakeout and Vibrating Dump Conveyor (SC-2) are in operation, in order to comply with this limit.

The baghouse (BH-1A) shall be in operation at all times that the Knockout process (BH-1) is in operation, in order to comply with this limit.

The dust collectors shall be in operation at all times that the twelve (12) dry grinders (BH-2) are in operation, in order to comply with this limit.

The requirements of 326 IAC 6-3-2 were not included in the Part 70 permit for the wet machining operation (F-5). Pursuant to 326 IAC 6-3-1(b)(14), manufacturing processes with potential emissions less than 0.551 pound per hour are exempt from 326 IAC 6-3. Since this is a wet machining operation where an aqueous coolant continuously floods the machining interface, there are no particulate emissions from this operation.

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

- (a) Goff Blast # 1 with one (1) dust collector for particulate matter control, with a gas flow rate of 2,000 acfm and a design grain loading of less than 0.03 dscf;
- (b) Goff Blast # 2 with one (1) dust collector for particulate matter control, with a gas flow rate of 3,700 acfm and a design grain loading of less than 0.03 dscf;
- (c) Goff Blast # 3 with one (1) dust collector for particulate matter control, with a gas flow rate of 3,700 acfm and a design grain loading of less than 0.03 dscf;
- (d) Trimmers that do not produce fugitive emissions that are equipped with a dust collection or trim material recovery device such as a bag filter or cyclone;

326 IAC 8-1-6 (New Facilities, General Reduction Requirements)

This rule applies to new facilities which have potential emissions of 25 tons or more per year of VOC that were constructed after January 1, 1980. The knockout operation (BH-1), mold making and sand reclamation operation (SC-1), the shakeout operation (SC-2), the Sutter core machines (SC-3), the pouring operation (F-1), and the prototype core making operation (SC-5) were all constructed prior to January 1, 1980, therefore, they are not subject to the requirements of 326 IAC 8-1-6. The potential VOC emissions from the reverberatory furnace melting, fluxing, and combustion operations (S-1), and the crucible furnace melting, fluxing, and combustion operations (S-2), the machining lines (F-5), and the insignificant combustion units (F-6) are each below the twenty-five (25) tons per year applicability threshold and, therefore, are not subject to the requirements of 326 IAC 8-1-6.

The two (2) core machines (SC-4) constructed after January 1, 1980 have an uncontrolled potential to emit greater than 25 tons per year of VOC. However, pursuant to Title V permit (T169-6598-00042), issued on June 11, 1999, the Best Available Control Technology (BACT) for the two (2) core machines (SC-4) will be the operation of the acid scrubber at all times the core machines are in operation and the scrubber shall operate at an overall control efficiency of 90%.

326 IAC 8-3-2 (Cold Cleaner Operations)

The cleaner with a remote solvent reservoir, an insignificant activity, is subject to this rule since it is a cold cleaning operation which was constructed after January 1, 1980. Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), for cold cleaning operations constructed after January 1, 1980, the Permittee shall:

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

326 IAC 8-3-5 (Cold Cleaner Degreaser Operation and Control)

The cold cleaning operation at this source, which has a remote solvent reservoir, is not subject to this rule because this rule only applies to cold cleaner degreasers without a remote solvent reservoir.

Testing Requirements

All testing requirements from previous approvals were incorporated into the Part 70 permit. Previous stack tests to comply with this requirement were conducted as follows:

- (a) PM and opacity testing was performed on one of the reverberatory furnaces on October 1, 2001. The tests showed that this unit was in compliance with the PM emission limits in condition D.1.1 of the original Part 70 permit (T169-6598-00042). Repeat testing for PM and PM10 as well as testing for HCl, HFI, and Cl emissions from fluxing will be required prior to April, 2007 for one of the reverberatory furnaces while fluxing is occurring in order to demonstrate compliance with the particulate emission limits pursuant to 326 IAC 6-3-2, the PSD minor limits, and to verify the HAPs emissions associated with the furnaces. The testing for HCl, HFI, and Cl will be a one time test to verify the HAPs emissions associated with the furnaces.
- (b) PM and opacity testing was performed on the mold making and sand reclamation operation and the shakeout and vibrating dump conveyor operations on September 19, 2001. These tests showed that these units were in compliance with the PM emission limits in conditions D.3.2 and D.4.1 at 46% and 44% of capacity, respectively. Repeat testing on these units to demonstrate compliance with the particulate emission limits pursuant to 326 IAC 6-3-2 and the PM and PM10 emission limits to render 326 IAC 2-2 (PSD) not applicable will be required prior to April, 2007.
- (c) Within 90 days after issuance of this Part 70 permit, in order to demonstrate compliance with the PSD minor PM and PM10 emission limits and to demonstrate compliance with the particulate emission limit pursuant to 326 IAC 6-3-2, the Permittee shall perform PM and PM-10 testing for the pouring operation (F-1) utilizing methods as approved by the Commissioner. PM-10 includes filterable and condensable PM-10. Testing shall be conducted in accordance with Section C- Performance Testing. This test will be a one time test to verify the PM and PM10 emissions associated with the pouring operation.
- (d) Within 90 days after issuance of this Part 70 permit, in order to demonstrate compliance with the PSD minor CO emission limit, the Permittee shall perform CO testing on the pouring (F-1), cooling, and shakeout (SC-2) operations utilizing methods as approved by the Commissioner. Testing shall be conducted in accordance with Section C- Performance Testing. This test will be a one time test to verify the CO emissions associated with the pouring, cooling and shakeout operations.

The crucible furnace is similar in design to the reverberatory furnace. Therefore, the PM and PM10 emissions factors for the crucible furnace will be same as that for the reverberatory furnace, and the compliance stack tests for PM and PM10 emissions from the crucible furnace will not be required. The worst case emission factors from the stack test results for the reverberatory furnace will be used to demonstrate compliance with the emission limits necessary to render 326 IAC 2-2 (PSD) not applicable to the crucible furnace.

Testing is not required for the scrubber controlling TEA emissions from the CB core machines (SC-4). Conservative emission factors were used to calculate potential TEA emissions from the core machines and TEA usage is equal to TEA emissions. Compliance monitoring of the pH of the scrubber will ensure compliance with the requirements pursuant to 326 IAC 8-1-6 (BACT).

Testing is not required for the six (6) scrubbers controlling TEA emissions from the Sutter core machines (SC-3). Conservative emission factors were used to calculate potential TEA emissions from the core machines, TEA usage is equal to TEA emissions. Compliance monitoring of the pH of the scrubbers will ensure compliance with the VOC emission limits to render the requirements of 326 IAC 2-2 not applicable.

Testing is not required for the knockout operation (BH-1), sawing and grinding (BH-2), or the machining operation (F-5) because they do not meet any of the criteria which would require a test.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also in Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period. The compliance monitoring requirements applicable to this source are as follows:

1. The melting and combustion operation (S-1) has applicable compliance monitoring conditions as specified below:
 - (a) Visible emission notations of the two (2) stack exhausts (Stacks S-1A and S-1B) shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
 - (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
 - (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
 - (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
 - (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

These monitoring conditions are necessary because the furnaces must operate properly to ensure compliance with 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes) and 326 IAC 2-7 (Part 70).

2. The melting and combustion operation (S-2) has applicable compliance monitoring conditions as specified below:
 - (a) Visible emission notations of the stack exhaust (Stack S-2A) shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

These monitoring conditions are necessary because the crucible furnace must operate properly to ensure compliance with 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) and 326 IAC 2-7 (Part 70).

3. The mold making and sand reclamation operation (SC-1) has applicable compliance monitoring conditions as specified below:
- (a) Visible emission notations of the cyclone wet scrubber stack exhaust (Stack SC-1A) shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
 - (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
 - (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
 - (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
 - (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

- (f) The Permittee shall record the liquid flow rate and pressure drop across the cyclone wet scrubber used in conjunction with the mold making and sand reclamation operation, at least once per day when the mold making and sand reclamation is in operation. When for any one reading, the flow rate of the cyclone wet scrubber is less than 50 gallons per minute or a range established during the latest stack test, or the pressure drop across the cyclone wet scrubber is outside the normal range of 2.0 to 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. A flow rate that is less than 50 gallons per minute or a pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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

- (g) In the event that cyclone wet scrubber failure has been observed:
- (1) Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions). Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

These monitoring conditions are necessary because the cyclone wet scrubber for the mold making and sand reclamation operation must operate properly to ensure compliance with 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) and 326 IAC 2-7 (Part 70) and to comply with 40 CFR 64 (CAM).

4. The shakeout and vibrating dump conveyor (SC-2) has applicable compliance monitoring conditions as specified below:
- (a) Visible emission notations of the cyclone wet scrubber stack exhaust (Stack SC-2A) shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.
- (f) The Permittee shall record the liquid flow rate and pressure drop across the cyclone wet scrubber used in conjunction with the Shakeout and Vibrating Dump Conveyor (SC-2), at least once per day when the Shakeout and Vibrating Dump Conveyor (SC-2) is in operation. When for any one reading, the flow rate of the cyclone wet scrubber is less than 50 gallons per minute or a range established during the latest stack test, or the pressure drop across the cyclone wet scrubber is outside the normal range of 2.0 to 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. A flow rate that is less than 50 gallons per minute or a pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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

- (g) In the event that cyclone wet scrubber failure has been observed:
 - (1) Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions). Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

These monitoring conditions are necessary because the cyclone wet scrubber for the shakeout and vibrating dump conveyor must operate properly to ensure compliance with 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) and 326 IAC 2-7 (Part 70) and to comply with 40 CFR 64 (CAM).

- 5. The six (6) Sutter core machines (SC-3) have applicable compliance monitoring conditions as specified below:

- (a) The Permittee shall record the pH of the liquid in each of the six (6) acid scrubbers used in conjunction with the Sutter core machines, at least once per day when the Sutter core machines are in operation. When for any one reading, the pH of the liquid in the six (6) acid scrubbers is greater than 5.0 standard units or a pH established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. A pH that is greater than the above mentioned value is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

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

- (b) In the event that acid scrubber failure has been observed:
 - (1) Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions). Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

These monitoring conditions are necessary because the six (6) acid scrubbers for the Sutter core machines must operate properly to ensure compliance with the limits to render 326 IAC 2-2 (PSD) not applicable and to ensure compliance with 326 IAC 2-7 (Part 70) and to comply with 40 CFR 64 (CAM).

6. The knockout operation (BH-1) has applicable compliance monitoring conditions as specified below:
- (a) Visible emission notations of the knockout operation baghouse stack exhaust (BH-1A) shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
 - (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
 - (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
 - (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
 - (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.
 - (f) The Permittee shall record the pressure drop across the baghouse used in conjunction with the knockout operation, at least once per day when the process is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 1.0 to 5.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

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

- (g) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
- (h) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the emissions unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

These monitoring conditions are necessary because the baghouse for the knockout operation must operate properly to ensure compliance with 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) and 326 IAC 2-7 (Part 70) and to comply with 40 CFR 64 (CAM).

- 7. The two (2) CB core machines (SC-4) have applicable compliance monitoring conditions as specified below:
 - (a) The Permittee shall record the pH of the liquid in the acid scrubber used in conjunction with the CB core machines, at least once per day when the CB core machines are in operation. When for any one reading, the pH of the liquid in the acid scrubber is greater than 5.0 standard units or a pH established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. A pH that is greater than the above mentioned value is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

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

- (b) In the event that acid scrubber failure has been observed:
 - (1) Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions). Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

These monitoring conditions are necessary because the one (1) acid scrubber for the CB core machines must operate properly to ensure compliance with 326 IAC 8-1-6 (New Facilities, General Reduction Requirements) and 326 IAC 2-7 (Part 70).

8. There are no compliance monitoring requirements applicable to the twelve (12) dry grinders (BH-2) because these units exhaust inside the building prior to exhausting to the atmosphere and emissions after control are minimal.

Conclusion

The operation of this aluminum production operation that manufactures aluminum motor vehicle parts shall be subject to the conditions of this Part 70 permit 169-17972-00042.

Appendix A: Emission Calculations Summary

Company Name: Hayes Lemmerz International - Wabash, Inc.
Address City IN Zip: 3837 West Mill Street Extended, Wabash, Indiana 46992
Operating Permit No.: T169-17972
Pit ID: 169-00042
Reviewer: Trish Earls

Uncontrolled Potential Emissions (tons/year)														
Emissions Generating Activity														
Pollutant	Melting, Fluxing and Combustion (S-1)	Crucible Melting, Fluxing and Combustion (S-2)	Mold Making and Sand Reclamation (SC-1)	Shakeout and Vibrating Dump Conveyor (SC-2)	Old Core Machines (SC-3)	Core Machines (SC-4)	Prototype Core Machines (SC-5)	Knockout (BH-1)	Sawing and Grinding (BH-2)	Pouring (F-1)	Machining (F-5)	Insignificant Combustion Units (F-6)	Roadways (F-7)	TOTAL
PM	47.13	8.36	174.61	159.64	0.00	0.00	0.00	1,530.92	424.40	47.24	0.00	0.43	17.10	2,409.83
PM10	49.08	8.53	159.64	111.75	0.00	0.00	0.00	1,530.92	42.44	46.89	0.00	1.73	17.10	1,968.08
SO2	27.79	4.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.14	0.00	33.88
NOx	57.46	7.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.00	22.73	0.00	87.92
VOC	8.01	1.27	39.05	23.45	480.57	81.87	1.45	25.32	0.31	6.98	3.43	1.25	0.00	672.96
CO	28.70	2.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	132.90	0.00	19.10	0.00	183.28
total HAPs	10.75	1.94	0.00	0.00	269.74	45.03	0.15	2.88	0.00	6.98	0.00	0.43	0.00	337.90
worst case single HAP	(HCl) 7.02	(HCl) 1.30	0.00	0.00	(TEA) 264.90	(TEA) 44.22	(Xylene) 0.07	(Phenol) 1.73	0.00	(Benzene) 3.02	0.00	(Hexane) 0.41	0.00	(TEA) 309.12
Total emissions based on rated capacity at 8,760 hours/year.														
Controlled Potential Emissions (tons/year)														
Emissions Generating Activity														
Pollutant	Melting, Fluxing and Combustion (S-1)	Crucible Melting, Fluxing and Combustion (S-2)	Mold Making and Sand Reclamation (SC-1)	Shakeout and Vibrating Dump Conveyor (SC-2)	Old Core Machines (SC-3)	Core Machines (SC-4)	Prototype Core Machines (SC-5)	Knockout (BH-1)	Sawing and Grinding (BH-2)	Pouring (F-1)	Machining (F-5)	Insignificant Combustion Units (F-6)	Roadways (F-7)	TOTAL
PM	47.13	8.36	12.22	8.40	0.00	0.00	0.00	1.00	0.42	35.51	0.00	0.43	8.55	122.03
PM10	49.08	8.53	11.17	5.88	0.00	0.00	0.00	1.00	0.04	35.25	0.00	1.73	8.55	121.23
SO2	27.79	4.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.75	0.00	0.14	0.00	33.63
NOx	57.46	7.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38	0.00	22.73	0.00	87.80
VOC	8.01	1.27	15.44	17.63	40.00	39.90	1.45	16.50	0.31	5.25	3.43	1.25	0.00	150.44
CO	28.70	2.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	99.90	0.00	19.10	0.00	150.28
total HAPs	10.75	1.94	0.00	0.00	5.83	5.21	0.15	1.88	0.00	6.98	0.00	0.43	0.00	33.17
worst case single HAP	(HCl) 7.02	(HCl) 1.30	0.00	0.00	(TEA) 5.00	(TEA) 4.42	(Xylene) 0.07	(Phenol) 1.13	0.00	(Benzene) 3.02	0.00	(Hexane) 0.41	0.00	(TEA) 9.42
Total emissions based on rated capacity at 8,760 hours/year, after control.														
Notes:														
1. Emissions from the sawing and grinding operation (BH-2), the machining operation (F-5), and the roadways (F-7) are based on the original Title V permit (T169-6598-00042) issued on June 11, 1999.														

Appendix A: Secondary Aluminum Foundry Operations

Company Name: Hayes Lemmerz International - Wabash, Inc.
Address City IN Zip: 3837 West Mill Street Extended, Wabash, Indiana 46992
Operating Permit No.: T169-17972
Pit ID: 169-00042
Reviewer: Trish Earls

SCC# 3-04-001-03		Maximum Throughput				
Two (2) Reverberatory Furnaces (S-1)		LBS/HR	TON/HR			
TYPE OF MATERIAL	Metal	14000	7		Control Device:	NA
	Flux	54	0.027		Control Efficiency:	NA
Aluminum + Flux						
	PM lbs/ton metal & flux charged 1.51	PM10 lbs/ton metal & flux charged 1.51	SOx lbs/ton metal charged 0.90	NOx lbs/ton metal charged 0.76	VOC lbs/ton metal charged 0.20	CO lbs/ton metal charged 0.00
Potential Uncontrolled Emissions lbs/hr	10.61	10.61	6.3	5.3	1.4	0.0
Potential Uncontrolled Emissions tons/year	46.48	46.48	27.59	23.30	6.13	0.00
Potential Controlled Emissions lbs/hr	10.61	10.61	6.3	5.3	1.4	0.0
Potential Controlled Emissions tons/year	46.48	46.48	27.59	23.30	6.13	0.00
Reverberatory furnaces do not melt simultaneously. Note: PM emission factor is from stack test conducted on 10/1/01 on one of the reverberatory furnaces. PM is assumed equal to PM10. Emission factor was obtained while fluxing was occurring in the furnace at a maximum rate of 54 pounds per hour, therefore, emissions represent emissions from melting and fluxing. SO2, NOx, and VOC emission factor from USEPA's Factor Information Retrieval (FIRE) Data System, version 6.24.						
SCC# 3-04-001-02		Maximum Throughput				
Crucible Furnace (S-2)		LBS/HR	TON/HR			
TYPE OF MATERIAL	Metal	2500	1.25		Control Device:	NA
	Flux	10	0.005		Control Efficiency:	NA
Aluminum + Flux						
	PM lbs/ton metal & flux charged 1.51	PM10 lbs/ton metal & flux charged 1.51	SOx lbs/ton metal charged 0.90	NOx lbs/ton metal charged 0.76	VOC lbs/ton metal charged 0.20	CO lbs/ton metal charged 0.00
Potential Uncontrolled Emissions lbs/hr	1.90	1.90	1.13	0.95	0.25	0.0
Potential Uncontrolled Emissions tons/year	8.30	8.30	4.93	4.16	1.10	0.00
Potential Controlled Emissions lbs/hr	1.90	1.90	1.13	0.95	0.25	0.00
Potential Controlled Emissions tons/year	8.30	8.30	4.93	4.16	1.10	0.00
Note: PM emission factor is from stack test conducted on 10/1/01 on one of the reverberatory furnaces. PM is assumed equal to PM10. Emission factor was obtained while fluxing was occurring in the furnace at a maximum rate of 54 pounds per hour, therefore, emissions represent emissions from melting and fluxing. SO2, NOx, and VOC emission factor from USEPA's Factor Information Retrieval (FIRE) Data System, version 6.24.						

Appendix A: Secondary Aluminum Foundry Operations

Company Name: Hayes Lemmerz International - Wabash, Inc.
 Address City IN Zip: 3837 West Mill Street Extended, Wabash, Indiana 46992
 Operating Permit No.: T169-17972
 Pit ID: 169-00042
 Reviewer: Trish Earls

SCC# 3-04-001-14		Maximum Throughput			
Pouring/Casting (F-1)		LBS/HR	TON/HR	Control Device: N/A	
TYPE OF MATERIAL		22780	11.39	Control Efficiency: N/A	
Aluminum		Limited Throughput			
		LBS/HR	TON/HR		
		17123	8.56		

	PM lbs/ton metal charged 0.947	PM10 lbs/ton metal charged 0.94	SOx lbs/ton metal charged 0.02	NOx lbs/ton metal charged 0.01	VOC lbs/ton metal charged 0.14	CO lbs/ton metal charged 2.664
Potential Uncontrolled Emissions lbs/hr	10.79	10.71	0.23	0.11	1.59	30.3
Potential Uncontrolled Emissions tons/year	47.24	46.89	1.00	0.50	6.98	132.90
Limited Uncontrolled Emissions lbs/hr	8.11	8.05	0.17	0.09	1.20	22.81
Limited Uncontrolled Emissions tons/year	35.51	35.25	0.75	0.38	5.25	99.90

Note: Emission factors from USEPA's Factor Information Retrieval (FIRE) Data System, version 6.24.
 PM, PM10, and CO emissions from pouring are based on the maximum allowable PM, PM10, and CO emissions so that PM, PM10, and CO emissions from all units installed in 1978 are limited to less than 100 tons per year to render 326 IAC 2-2 (PSD) not applicable. CO emissions also include emissions from cooling and shakeout.
 Additional VOC emissions from core making included on page 8 of Appendix A.

Mold Making and Sand Reclamation (SC-1)		Maximum Throughput			
		LBS/HR	TON/HR	Control Device: East Cyclone Wet Scrubber	
TYPE OF MATERIAL		22780	11.39	Control Efficiency: 93.00%	
Aluminum					

	PM lbs/ton metal 3.5	PM10 lbs/ton metal 3.2	SOx lbs/ton metal 0.00	NOx lbs/ton metal 0.00	VOC lbs/ton metal 0.06	CO lbs/ton metal 0.00
Potential Uncontrolled Emissions lbs/hr	39.87	36.45	0.0	0.0	0.68	0.0
Potential Uncontrolled Emissions tons/year	174.61	159.64	0.00	0.00	2.99	0.00
Potential Controlled Emissions lbs/hr	2.79	2.55	0.0	0.0	0.68	0.0
Potential Controlled Emissions tons/year	12.22	11.17	0.0	0.0	2.99	0.0

Note: PM and VOC emission factors from 1995 and 2001 stack tests.
 PM10 emission factor from PM data and particle size distribution.

Appendix A: Secondary Aluminum Foundry Operations

Company Name: Hayes Lemmerz International - Wabash, Inc.
Address City IN Zip: 3837 West Mill Street Extended, Wabash, Indiana 46992
Operating Permit No.: T169-17972
Plt ID: 169-00042
Reviewer: Trish Earls

Shakeout and Vibratory Conveyor (SC-2)		Maximum Throughput				
TYPE OF MATERIAL	LBS/HR	TON/HR	Control Device: West Cylone Wet Scrubber			
	22780	11.39	Control Efficiency: 93.00%			
		Limited Throughput				
		LBS/HR	TON/HR			
Aluminum		17123	8.56			
	PM lbs/ton metal	PM10 lbs/ton metal	SOx lbs/ton metal	NOx lbs/ton metal	VOC lbs/ton metal	CO lbs/ton metal
	3.2	2.24	0.0	0.0	0.47	0.0
Potential Uncontrolled Emissions lbs/hr	36.45	25.51	0.0	0.0	5.4	0.0
Potential Uncontrolled Emissions tons/year	159.64	111.75	0.00	0.00	23.45	0.00
Limited Controlled Emissions lbs/hr	1.92	1.34	0.0	0.0	4.02	0.0
Limited Controlled Emissions tons/year	8.40	5.88	0.00	0.00	17.63	0.00

Note: PM emission factor from USEPA's Factor Information Retrieval (FIRE) Data System, version 6.24 for similar operation at gray iron foundry.
 PM10 emission factor based on PM emission factor and particle size distribution obtained from 1995 stack test.
 VOC emission factor from 1995 stack test.
 CO emissions from the shakeout operation are included in the CO emission calculations for the pouring operation.

SCC# 3-04-001-99 Knockout (BH-1)		Maximum Throughput				
TYPE OF MATERIAL	LBS/HR	TON/HR	Control Device: Baghouse BH-1A			
	26280	13.14	Control Efficiency: 99.90%			
		Limited Throughput				
		LBS/HR	TON/HR			
Sand		17123	8.56			
	PM lbs/ton sand	PM10 lbs/ton sand	SOx lbs/ton sand	NOx lbs/ton sand	VOC lbs/ton sand	CO lbs/ton sand
	26.6	26.6	0.0	0.0	0.44	0.0
Potential Uncontrolled Emissions lbs/hr	349.52	349.52	0.0	0.0	5.8	0.0
Potential Uncontrolled Emissions tons/year	1530.92	1530.92	0.00	0.00	25.32	0.00
Potential Controlled Emissions lbs/hr	0.23	0.23	0.0	0.0	3.77	0.0
Potential Controlled Emissions tons/year	1.00	1.00	0.00	0.00	16.50	0.00

Note: Emission factors based on 1995 stack test.

**Appendix A: Secondary Aluminum Foundry Operations
Core Making Emissions**

Company Name: Hayes Lemmerz International - Wabash, Inc.
Address City IN Zip: 3837 West Mill Street Extended, Wabash, Indiana 46992
Operating Permit No.: T169-17972
Plt ID: 169-00042
Reviewer: Trish Earls

Machine	Date of Construction	Capacity (tons cores/hr)	Maximum Resin Content (%)	VOC Emission Factor from Resin Evaporation (lb/ton cores)	Max Catalyst Usage (lb catalyst/ton cores)	Potential VOC Emissions from resin evap (tons/yr)	Potential TEA Emissions from TEA usage (tons/yr)	Total Potential VOC Emissions (tons/yr)
Phenolic Urethane Cold Box Core Making								
Sutter Core Machine #1	1978	3.15	1%	1	3.2	13.80	44.15	57.95
Sutter Core Machine #2	1978	3.15	1%	1	3.2	13.80	44.15	57.95
Sutter Core Machine #3	1978	3.15	1%	1	3.2	13.80	44.15	57.95
Sutter Core Machine #4	1978	3.15	1%	1	3.2	13.80	44.15	57.95
Sutter Core Machine #5	1978	3.15	1%	1	3.2	13.80	44.15	57.95
Sutter Core Machine #6	1978	3.15	1%	1	3.2	13.80	44.15	57.95
CB Core Machine #1	1994	1.65	1%	1	3.06	7.23	22.11	29.34
CB Core Machine #2	1994	1.65	1%	1	3.06	7.23	22.11	29.34
Phenolic Urethane No Bake Core Making								
Prototype Core Making*	1978	0.1	1.8%	1.8	1.5	0.79	0.66 (VOC not TEA)	1.45
Total						98.02	309.13	407.82

* Catalyst used in Prototype Core Making is not a TEA catalyst.

Limits Necessary to render 326 IAC 2-2 (PSD) not applicable:

Core Machines	VOC limit (tons/yr)	VOC EF for resin evaporation (lb/ton cores)	VOC EF for resin evaporation (lb VOC/lb resin)	TEA EF (lb/ton cores)	core production (tons cores/yr)	TEA usage limit (lbs/yr)	resin usage limit (lbs/yr)
Sutter Core Machine #1	19.88*	1	0.05	3.2	9,467	100,000	600,000
Sutter Core Machine #2							
Sutter Core Machine #3							
Sutter Core Machine #4							
Sutter Core Machine #5							
Sutter Core Machine #6							
CB Core Machine #1	29.34	1	0.05	3.06	14,454	44,229	289,080
CB Core Machine #2	29.34	1	0.05	3.06	14,454	44,229	289,080
Prototype Core Making*	N/A	1	0.05	1.5	N/A	N/A	N/A

Emission factors based on study by Ohio Cast Metals Association for phenolic urethane cold box binder system increased to provide a conservative estimate of uncontrolled emissions so that no stack test would be necessary to verify emissions.

Catalyst and resin usage limits for Sutter Core Machines were based on use of the TEA scrubber for control of TEA emissions from catalyst usage.

Core Machines	TEA Scrubber Control Eff. (%)	Catalyst Controlled/Limited TEA Emissions (tons/yr)	Resin Controlled/Limited VOC Emissions (tons/yr)	Total Controlled/Limited VOC Emissions (tons/yr)
Sutter Core Machine #1	90.00%	5.00	15.00	20.00
Sutter Core Machine #2				
Sutter Core Machine #3				
Sutter Core Machine #4				
Sutter Core Machine #5				
Sutter Core Machine #6				
CB Core Machine #1	90.00%	2.21	7.23	9.44
CB Core Machine #2	90.00%	2.21	7.23	9.44

Prototype Core Making*	0.00%	0.66 (VOC not TEA)	0.79	1.45
TOTAL		9.42	30.24	40.33

**Appendix A: Secondary Aluminum Foundry Operations
HAP Emission Calculations - Core Making**

Company Name: Hayes Lemmerz International - Wabash, Inc.
Address City IN Zip: 3837 West Mill Street Extended, Wabash, Indiana 46992
Operating Permit No.: T169-17972
Pit ID: 169-00042
Reviewer: Trish Earls

Material	Maximum Usage (lbs/hr)	Weight % Biphenyl	Weight % MDI	Weight % Formaldehyde	Weight % Naphthalene	Weight % Xylene	Weight % Cumene	Biphenyl Emissions (ton/yr)	MDI Emissions (ton/yr)	Formaldehyde Emissions (ton/yr)	Naphthalene Emissions (ton/yr)	Xylene Emissions (ton/yr)	Cumene Emissions (ton/yr)
Phenolic Urethane Cold Box Core Making (SC-3)													
Part I Binder	207.90	0.05%	0.00%	5.00%	3.07%	0.00%	0.00%	0.46	0.00	0.91	0.91	0.00	0.00
Part II Binder	170.10	1.54%	0.00%	0.00%	3.07%	0.00%	0.00%	0.37	0.00	0.00	0.74	0.00	0.00
Metal Cleaner	6.89	0.00%	0.00%	0.00%	4.80%	0.00%	0.00%	0.00	0.00	0.00	1.45	0.00	0.00
Phenolic Urethane Cold Box Core Making (SC-4)													
Part I Binder	34.70	0.05%	0.00%	5.00%	3.07%	0.00%	0.00%	0.08	0.00	0.15	0.15	0.00	0.00
Part II Binder	28.40	1.54%	0.00%	0.00%	3.07%	0.00%	0.00%	0.06	0.00	0.00	0.12	0.00	0.00
Metal Cleaner	1.20	0.00%	0.00%	0.00%	4.80%	0.00%	0.00%	0.00	0.00	0.00	0.25	0.00	0.00
Phenolic Urethane Cold Box Core Making (SC-5)													
Part I Binder	1.36	0.00%	0.00%	0.00%	0.00%	25.00%	11.08%	0.00	0.00	0.00	0.00	0.05	0.02
Part II Binder	1.14	0.00%	0.00%	0.00%	31.62%	0.85%	0.00%	0.00	0.00	0.00	0.05	1.4E-03	0.00
Catalyst	0.15	0.00%	0.00%	0.00%	0.00%	3.08%	1.32%	0.00	0.00	0.00	0.00	2.0E-02	0.01

0.97	0.00	1.06	3.68	0.07	0.03
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Total Potential Emissions: 5.81

SC-3 Resin Usage Limitation	SC-3 Suppl. Product Usage Limitation	SC-4 Suppl. Product Usage Limitation						
18.12%	15.05%	91.16%	0.29	0.00	0.32	1.07	0.07	0.03

Total Limited Emissions: 1.78

Reduction Factors for Core Making

Pollutant	Phenolic Urethane Cold Box Part I Reduction Factors	Phenolic Urethane Cold Box Part II Reduction Factors
Phenol	0.00%	N/A
MDI	N/A	0.00%
Formaldehyde	2.00%	N/A
Xylene	3.25%	3.25%
Naphthalene	3.25%	3.25%
Cumene	3.25%	N/A
Biphenyl	N/A	3.25%

METHODOLOGY

Max. Hourly Resin Usage Rate = Max. Annual Resin Usage rate (lbs/yr) / 8,760 (hrs/yr)

HAP Emissions from Resins = Max. Hourly Usage Rate * % HAP * Reduction Factor * 8760 hrs/yr * 1 ton/2000 lbs

Reduction factors obtained from the American Foundrymen's Society Publication entitled "Form R Reporting of Binder Chemicals used in Foundries", and refers to the weight percent of HAP that is emitted to the atmosphere.

HAP Emissions from Metal Cleaner and Catalyst = Max. Hourly Usage Rate * % HAP * 8760 hrs/yr * 1 ton/2000 lbs

**Appendix A: Emissions Calculations
VOC and Particulate
From Surface Coating Operations**

Company Name: Hayes Lemmerz International - Wabash, Inc.
Address City IN Zip: 3837 West Mill Street Extended, Wabash, Indiana 46992
Operating Permit No.: T169-17972
Plt ID: 169-00042
Reviewer: Trish Earls

Material	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Pounds of Material Used (lbs/hr)	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
Mold Making and Sand Reclamation (SC-1)												
Mold Release Agent	98.00%	0.0%	98.0%	0.0%	0.00%	8.40	8.23	197.57	36.06	0.00	N/A	N/A
Sutter Core Machines (SC-3) Supplemental Products Usage (Manual Application)												
Metal Cleaner	98.00%	0.0%	98.0%	0.0%	2.00%	6.89	6.75	162.05	29.57	0.00	N/A	100%
Core Release	10.00%	0.0%	10.0%	0.0%	90.00%	0.33	0.03	0.79	0.14	0.00	N/A	100%
Reducer	100.00%	0.0%	100.0%	0.0%	0.00%	6.51	6.51	156.24	28.51	0.00	N/A	100%
Core Glue	30.00%	0.0%	30.0%	0.0%	70.00%	21.53	6.46	155.02	28.29	0.00	N/A	100%
Core Coating	84.00%	0.0%	84.0%	0.0%	16.00%	12.33	10.36	248.57	45.36	0.00	N/A	100%
Core Mud	10.50%	0.0%	10.5%	0.0%	89.50%	2.18	0.23	5.49	1.00	0.00	N/A	100%
CB Core Machines (SC-4) Supplemental Products Usage (Manual Application)												
Metal Cleaner	98.00%	0.0%	98.0%	0.0%	2.00%	1.20	1.18	28.22	5.15	0.00	N/A	100%
Core Release	10.00%	0.0%	10.0%	0.0%	90.00%	0.06	0.01	0.14	0.03	0.00	N/A	100%
Reducer	100.00%	0.0%	100.0%	0.0%	0.00%	1.14	1.14	27.36	4.99	0.00	N/A	100%
Core Glue	30.00%	0.0%	30.0%	0.0%	70.00%	3.76	1.13	27.07	4.94	0.00	N/A	100%
Core Coating	84.00%	0.0%	84.0%	0.0%	16.00%	2.15	1.81	43.34	7.91	0.00	N/A	100%
Core Mud	10.50%	0.0%	10.5%	0.0%	89.50%	0.38	0.04	0.96	0.17	0.00	N/A	100%

State Potential Emissions

43.87	1052.84	192.14	0.00
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	SC-1 Usage Limitation	SC-3 Usage Limitation	SC-4 Usage Limitation				
Total Limited Emissions:	34.53%	15.05%	91.16%	12.24	293.67	53.60	0.00

METHODOLOGY

Potential VOC Pounds per Hour = Pounds of Material (lbs/hr) * Weight % VOC
 Potential VOC Pounds per Day = Potential VOC Pounds per Hour * (24 hr/day)
 Potential VOC Tons per Year = Pounds of VOC per Hour * (8760 hr/yr) * (1 ton/2000 lbs)

**Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Small Industrial Boiler**

Company Name: Hayes Lemmerz International - Wabash, Inc.
Address City IN Zip: 3837 West Mill Street Extended, Wabash, Indiana 46992
Operating Permit No.: T169-17972
Plt ID: 169-00042
Reviewer: Trish Earls

Heat Input Capacity MMBtu/hr		Potential Throughput MMCF/yr
78.0	Reverb. Furnaces (S-1)	683.3
7.0	Crucible Furnace (S-2)	61.3
51.9	Insignificant Activities	454.6

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	1.9	7.6	0.6	100.0	5.5	84.0
				**see below		
S-1 Potential Emissions in tons/yr	0.65	2.60	0.20	34.16	1.88	28.70
S-2 Potential Emissions in tons/yr	0.06	0.23	0.02	3.07	0.17	2.58
Insig. Activities Potential Emissions in tons/yr	0.43	1.73	0.14	22.73	1.25	19.10

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

See page 12 for HAPs emissions calculations.

**Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Small Industrial Boiler
HAPs Emissions**

Company Name: Hayes Lemmerz International - Wabash, Inc.
Address City IN Zip: 3837 West Mill Street Extended, Wabash, Indiana 46992
Operating Permit No.: T169-17972
Pit ID: 169-00042
Reviewer: Trish Earls

HAPs - Organics					
Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
S-1 Potential Emissions in tons/yr	7.174E-04	4.100E-04	2.562E-02	6.150E-01	1.162E-03
S-2 Potential Emissions in tons/yr	6.439E-05	3.679E-05	2.300E-03	5.519E-02	1.042E-04
Insig. Activities Potential Emissions in tons/yr	4.774E-04	2.728E-04	1.705E-02	4.092E-01	7.729E-04

HAPs - Metals						
Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03	Total
S-1 Potential Emissions in tons/yr	1.708E-04	3.758E-04	4.783E-04	1.298E-04	7.174E-04	0.64
S-2 Potential Emissions in tons/yr	1.533E-05	3.373E-05	4.292E-05	1.165E-05	6.439E-05	0.06
Insig. Activities Potential Emissions in tons/yr	1.137E-04	2.501E-04	3.183E-04	8.638E-05	4.774E-04	0.43

Methodology is the same as page 11.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.