



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: June 17, 2008

RE: Weil-Mclain / 091-26372-00020

FROM: Matthew Stuckey, Branch Chief
Permits Branch
Office of Air Quality

Notice of Decision: Approval – Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-17-3-4 and 326 IAC 2, this permit modification 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 13-15-7-3 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 Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

Pursuant to 326 IAC 2-7-18(d), any person may petition the U.S. EPA to object to the issuance of a Title V operating permit 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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Mr. Gary Connor
Weil-McLain
500 Blaine Street
Michigan City, 46360

June 17, 2008

Re: 091-26372-00020
Significant Permit Modification to
Part 70 Operating Permit No.: T 091-6295-
00020

Dear Mr. Connor:

Weil-McLain was issued a Part 70 Operating Permit on December 30, 2002 for a gray iron foundry. A letter requesting changes to this permit was received on April 2, 2008. Pursuant to the provisions of 326 IAC 2-7-12 a significant permit modification to this permit is hereby approved as described in the attached Technical Support Document.

All other conditions of the permit shall remain unchanged and in effect. For your convenience, the entire Part 70 Operating Permit as modified will be provided at issuance.

This decision is subject to the Indiana Administrative Orders and Procedures Act – IC 4-21.5-3-5. If you have any questions on this matter, please contact Josiah Balogun, OAQ, 100 North Senate Avenue, MC 61-53, Room 1003, Indianapolis, Indiana, 46204-2251, or call at (800) 451-6027, and ask for Josiah Balogun or extension (4-5257), or dial (317) 234-5257.

Original signed by,

Tripurari Sinha, Ph.D., Section Chief
Permits Branch
Office of Air Quality

Attachments:
Updated Permit
Technical Support Document

JB

cc: File – La Porte County
La Porte County Health Department
U.S. EPA, Region V
Air Compliance Inspector
Compliance Data Section
Permits Administration and Development



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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Toll Free (800) 451-6027
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PART 70 OPERATING PERMIT OFFICE OF AIR QUALITY

Weil-McLain
500 Blaine Street
Michigan City, Indiana 46360

(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.: 091-6295-00020	
Original signed by: Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: December 30, 2002 Expiration Date: December 30, 2007

First Significant Permit Modification No.: 091-20949-00020, issued on April 19, 2007

First Administrative Amendment No.: 091-24327-00020

Significant Permit Modification No.: 091-26372-00020	
Original signed by: Tripurari Sinha, Ph.D., Section Chief Permits Branch Office of Air Quality	Issuance Date: June 17, 2008

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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 gray iron foundry producing gray iron boilers.

Source Address:	500 Blaine Street, Michigan City, IN 46360
Mailing Address:	500 Blaine Street, Michigan City, IN 46360-2388
General Source Phone Number:	219-879-6561
SIC Code:	3321
County Location:	LaPorte
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Operating Permit Program Major Source, under PSD Rules Minor 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) natural gas fired preheater, installed in 2007, rated at 15.8 million (MM) British thermal units (Btu) per hour, with a maximum metal throughput of 20 tons per hour, controlled by one (1) dust collector (ID No. 39-DC-4), exhausting through one (1) stack (ID No. 39-DC-4);
- (b) four (4) electric induction furnaces (ID Nos. 1, 2, 3, and 4), each installed in 1991, each capable of melting a maximum of 5 tons per hour of metal, with emissions from metal charging for each furnace controlled by one (1) dust collector (ID No. 39-DC-4), exhausting through one (1) stack (ID No. 39-DC-4);
- (c) one (1) charge handling system, installed prior to 1977, processing a maximum of 20 tons of metal per hour exhausting inside the building;
- (d) one (1) electric holding furnace, installed in 1971, with a maximum molten metal storage capacity of 20 tons; the transfer of metal from the carrier ladle to the holding furnace exhausts through one (1) stack (ID No. 36-E-24);
- (e) one (1) mold making operation (ID No. A-Line Molding) consisting of the following:
 - (1) one (1) 250 ton capacity holding silo (ID No. A-Line Holding Silo), installed in 1984, controlled by one (1) baghouse (ID No. 36-1-DC-8), exhausting through one (1) stack (ID No. 36-1-DC-8), and one (1) 50 ton capacity bond silo, installed in 1984, controlled by one (1) bin vent;

- (2) one (1) green sand muller (ID No. A-Line Muller), installed in 1984, with a maximum green mold sand throughput of 200 tons per hour, controlled by one (1) baghouse (ID No. 36-1-DC-8), exhausting through one (1) stack (ID No. 36-1-DC-8);
 - (3) One (1) sand cooler constructed in 2008, with maximum capacity of 200 tons of sand per hour, with emissions controlled by one (1) baghouse (ID No. 36-1-DC-8) and exhausting through stack 36-1-DC-8.
 - (4) one (1) metal pouring operation (ID No. A-Line Pouring), installed in 1964, with a maximum throughput of 24 tons per hour of molten metal, and a maximum throughput of 10 tons of core sand per hour, exhausting through stack 36-E-12;
 - (5) one (1) metal cooling operation (ID No. A-Line Cooling), installed in 1964, with a maximum throughput of 24 tons per hour of molten metal, and a maximum throughput of 10 tons of core sand per hour, exhausting through exhaust fans 32-E-2 and 32-E-1; and
 - (6) one (1) mold and casting shakeout operation (ID No. A-Line Shakeout), installed in 1964, with a maximum metal casting throughput of 24 tons per hour, and a maximum throughput of 10 tons of core sand per hour, controlled by one (1) baghouse (ID No. 36-1-DC-8), exhausting through one (1) stack (ID No. 36-1-DC-8);
- (f) one (1) mold making operation (ID No. B-Line Molding) consisting of the following:
- (1) one (1) 75 ton capacity holding silo (ID No. B-Line Holding Silo), installed in 1987, controlled by one (1) baghouse (ID No. 36-1-DC-7), exhausting through one (1) stack (ID No. 36-1-DC-7), and one (1) 50 ton capacity bond silo, installed in 1987, controlled by one (1) bin vent;
 - (2) one (1) green sand muller (ID No. B-Line Muller), installed in 1987, with a maximum green mold sand throughput of 100 tons per hour, controlled by one (1) baghouse (ID No. 36-1-DC-7), exhausting through one (1) stack (ID No. 36-1-DC-7);
 - (3) one (1) metal pouring operation (ID No. B-Line Pouring), installed in 1986, with a maximum throughput of 9 tons per hour of molten metal, and a maximum throughput of 4 tons of core sand per hour, exhausting through stack 36-E-5;
 - (4) one (1) metal cooling operation (ID No. B-Line Cooling), installed in 1986, with a maximum throughput of 9 tons per hour of molten metal, and a maximum throughput of 4 tons of core sand per hour, exhausting partially through stack 36-E-6; and
 - (5) one (1) mold shakeout operation (ID No. B-Line Shakeout), installed in 1987, with a maximum metal casting throughput of 9 tons per hour, and a maximum throughput of 4 tons of core sand per hour, controlled by one (1) baghouse (ID No. 36-1-DC-7), exhausting through one (1) stack (ID No. 36-1-DC-7);
- (g) one (1) mold making operation (ID No. Floor Molding) consisting of the following:
- (1) one (1) High Speed Continuous Sand Mixer (ID Mixer) and associated High Speed Continuous Sand Mixer hopper, each installed in 2001, with a maximum mold sand throughput of 42 tons per hour, with the hopper controlled by one (1) baghouse (ID 30-DC-6), exhausting through one (1) stack (ID No. 30-DC-6).

- (2) one (1) metal pouring operation (ID No. Floor Pouring), installed in 1922, with a maximum throughput of 6 tons per hour of molten metal, a maximum throughput of 3 tons of core sand per hour, and a maximum throughput of 26 tons of mold sand per hour, exhausting inside the building;
- (3) one (1) metal cooling operation (ID No. Floor Cooling), installed in 1922, with a maximum throughput of 6 tons per hour of molten metal, a maximum throughput of 3 tons of core sand per hour, and a maximum throughput of 26 tons of mold sand per hour, exhausting inside the building;
- (4) one (1) mold shakeout operation (ID No. Floor Shakeout), installed in 1922, with a maximum metal casting throughput of 6 tons per hour, a maximum throughput of 3 tons of core sand per hour, and a maximum throughput of 26 tons of mold sand per hour. The Floor Shakeout is uncontrolled and exhausts inside the building;
- (h) one (1) casting knockout station (ID Floor Knockout Station), installed in 1965, with a maximum throughput of 15 tons of iron castings per hour, controlled by one (1) baghouse (ID No. 8-DC-2), exhausting inside the building.
- (i) one (1) Wheelabrator shot blast machine (ID No. Shot Blast), installed in 1990, with a maximum throughput of 31 tons of iron castings per hour, controlled by one (1) baghouse (ID No. 36-DC-8), exhausting inside the building;
- (j) one (1) Chill Iron shot blast machine (ID No. Chill Iron Shot Blast), installed in 1972, with a maximum throughput of 3,500 pounds of castings per hour, controlled by one (1) baghouse (ID No. 8-DC-2), exhausting inside the building;
- (k) one (1) paint spray booth (ID No. Spray Painting), installed in 1982, using a high volume low pressure (HVLP) coating application system, using a maximum of 9.8 pounds of coating per hour to coat metal base boards and a maximum of 10 gallons per year of paint thinner, with dry filters for particulate matter overspray control, exhausting through one (1) stack (ID No. 5-E-1);
- (l) One (1) indoor scrap handling operation consisting of the following:
 - (1) one (1) metal scrap crusher, with a maximum scrap metal throughput of 15 tons per hour, with one (1) baghouse (ID No. 39-DC-5) for control of particulate matter emissions, exhausting through one (1) stack (ID No. 39-DC-5);
 - (2) one (1) rotary reclaimer, with maximum scrap metal and sand throughputs of 15 and 10 tons per hour, respectively, with one (1) baghouse (ID No. 39-DC-5) for control of particulate matter emissions, exhausting through one (1) stack (ID No. 39-DC-5);
 - (3) one (1) sand and metal conveyor, with maximum scrap metal and sand throughputs of 15 and 10 tons per hour, respectively, with one (1) baghouse (ID No. 39-DC-5) for control of particulate matter emissions, exhausting through one (1) stack (ID No. 39-DC-5); and
 - (4) one (1) enclosed conveyor system transporting spent sand to spent sand storage silo, with a maximum sand storage capacity of 100 tons, and a maximum sand throughput of 10 tons per hour, with one (1) baghouse (ID No. 39-DC-5) for control of particulate matter emissions, exhausting through one (1) stack (ID No. 39-DC-5).

- (m) one (1) pneumatically conveyed raw sand storage silo for the High Speed Continuous Sand Mixer, with a maximum sand storage capacity of 75 tons, and a maximum sand throughput of 10 tons per hour, with one (1) baghouse (ID No. 39-DC-5) for control of particulate matter emissions, exhausting through one (1) stack (ID No. 39-DC-5);
- (n) two (2) 200 ton capacity core and mold sand silos (ID Nos. Silo #1 and Silo #2), both installed in 1950, each with a maximum sand throughput of 16.8 tons per hour, both controlled by one (1) baghouse (ID 37-1-DC-3), exhausting through one (1) stack (ID No. 37-1-DC-3);
- (o) one (1) Cold Box core making operation consisting of the following:
 - (1) one (1) Cold Box sand mixer, installed in 1975, with a maximum sand throughput of 5.8 tons per hour, controlled by one (1) baghouse (ID 36-1-DC-7), exhausting through one (1) stack (ID No. 36-1-DC-7);
 - (2) one (1) Cold Box core machine, installed in 1975, with a maximum throughput of 5.8 tons per hour of sand, with VOC and HAP emissions controlled by one (1) natural gas fired afterburner (ID No. Afterburner J), rated at 1.4 MMBtu per hour, exhausting through one (1) stack (ID No. 37-1-E-2); and
 - (3) one (1) 10 ton capacity Cold Box line sand hopper and elevator, installed in 1975, with a maximum sand throughput of 5.8 tons per hour, controlled by one (1) baghouse (ID 36-1-DC-7), which exhausts through one (1) stack (ID No. 36-1-DC-7);
- (p) one (1) No Bake core making operation consisting of the following:
 - (1) one (1) enclosed No Bake sand mixer, installed in 1979, consisting of the No Bake Large Core Mixer and the No Bake Small Core Mixer, with a maximum sand throughput of 6.0 tons per hour;
 - (2) one (1) No Bake core machine, installed in 1979, with a maximum throughput of 6.0 tons per hour of sand, exhausting inside the building; and
 - (3) one (1) 10 ton capacity No Bake line sand hopper, installed in 1979, with a maximum sand throughput of 6.0 tons per hour, controlled by one (1) baghouse (ID 36-1-DC-7), which exhausts through one (1) stack (ID No. 36-1-DC-7);
- (q) one (1) Warm Box core making operation consisting of the following:
 - (1) two (2) Warm Box mixers (ID Nos. Mixer 1 and Mixer 2), installed in 1971 and 1981, respectively, each with maximum throughputs of 3.5 and 1.5 tons of sand per hour, respectively, both controlled by one (1) baghouse (ID 36-1-DC-7), which exhausts through one (1) stack (ID No. 36-1-DC-7);
 - (2) three (3) Warm Box core machines (ID Warm Box Core Machines #1, #2, and #3), installed in 1971, 1976, and 1981, respectively, each with a maximum throughput of 1.73 tons per hour of sand, all exhausting inside the building; and
 - (3) one (1) 10 ton capacity Warm Box line sand hopper, installed in 1971, with a maximum sand throughput of 5.0 tons of sand per hour, controlled by one (1) baghouse (ID 36-1-DC-7), which exhausts through one (1) stack (ID No. 36-1-DC-7);

- (r) one (1) enclosed 10 ton capacity core and mold sand hopper, elevator, and conveyor, installed in 1975, with a maximum sand throughput of 16.8 tons per hour; and
- (s) one (1) dip tank (ID No. Dip Tank Painting), installed in 1970, using a maximum of 5.8 pounds of coating per hour to coat metal parts, exhausting through one (1) stack (ID No. 3-E-1).

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) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million Btu per hour:
 - (1) one (1) natural gas fired thermal oxidizer (ID No. Afterburner J), rated at 1.4 MMBtu per hour, controlling VOC and HAP emissions from the Cold Box core machine, exhausting through one (1) stack (ID No. 37-1-E-2);
- (b) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.
- (c) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (d) Paved and unpaved roads and parking lots with public access.
- (e) 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 less than or equal to 4,000 actual cubic feet per minute, including the following: deburring, buffing, polishing, abrasive blasting, pneumatic conveying, and woodworking operations. [326 IAC 6-3]
- (f) Other categories with emissions below insignificant thresholds:
 - (1) one (1) machining operation (ID No. Machining), modified in 1987, consisting of twenty eight (28) machines performing tapping, drilling, and reaming on the metal castings, with a maximum metal casting throughput of 20 tons per hour. Nine (9) machines are controlled by one (1) baghouse (ID No. 8-DC-2), two (2) machines are controlled by one (1) baghouse (ID No. 8-DC-1), and seventeen (17) machines are controlled by coolant. Potential PM and PM-10 emissions before control are less than twenty-five (25) pounds per day.
 - (2) the following petroleum aboveground storage tanks (AST):
 - (A) one (1) 2,000 gallon diesel fuel AST;
 - (B) two (2) 1,000 gallon propane ASTs;
 - (C) one (1) 275 gallon Dextron EF AST;
 - (D) one (1) 275 gallon anti-freeze AST;
 - (E) one (1) 275 gallon motor oil AST;
 - (F) one (1) 275 gallon hydraulic oil AST;
 - (G) two (2) 290 gallon Super Slik totes;
 - (H) five (5) 300 gallon fuel oil ASTs;
 - (I) one (1) 120 gallon propane AST;
 - (J) one (1) 275 gallon hydraulic oil AST;
 - (K) one (1) 275 gallon fuel oil AST;
 - (L) one (1) 500 gallon propane AST;

- (M) one (1) 2,000 gallon fuel oil AST; and
- (N) one (1) 800 gallon foam AST.

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, T091-6295-00020, 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 the "responsible official" of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.
- (c) The "responsible official" is defined at 326 IAC 2-7-1(34).

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

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

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

and

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

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
 - (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was continuous or intermittent;
 - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and
 - (5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ may require to determine the compliance status of the source.

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

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

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, 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, and Northwest Regional Office within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality,
Compliance Section), or
Telephone Number: 317-233-0178 (ask for Compliance Section)
Facsimile Number: 317-233-6865

Northwest Regional Office phone: (219) 757-0265; fax: (219) 757-0267.

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

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

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

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

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

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
 - (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
 - (e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(9) be revised in response to an emergency.
 - (f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
 - (g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
 - (h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

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 091-6295-00020 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
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

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

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)][326 IAC 2-7-8(a)][326 IAC 2-7-9]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ, determines any of the following:
- (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or

other terms or conditions.

- (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]
- (c) Proceedings by IDEM, OAQ, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

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

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ, and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

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

- (b) A timely renewal application is one that is:
 - (1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
 - (2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.18 Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12][40 CFR 72]

- (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
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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

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

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

- (a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.
- (b) Notwithstanding 326 IAC 2-7-12(b)(1) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

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

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b),(c), or (e) without a prior permit revision, if each of the following conditions is met:

- (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
- (2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;
- (3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
- (4) The Permittee notifies the:

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

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, 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.
- (f) This condition does not apply to emission trades of SO₂ or NO_x under 326 IAC 21 or 326 IAC 10-4.

B.21 Source Modification Requirement [326 IAC 2-7-10.5][326 IAC 2-2][326 IAC 2-3]

- (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 and/or 326 IAC 2-3-2.

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
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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

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

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

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

B.25 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314] [326 IAC 1-1-6]

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

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

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

C.1 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.

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 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
MC 61-52 IGCN 1003
Indianapolis, Indiana 46204-2251

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (e) **Procedures for Asbestos Emission Control**
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Demolition and Renovation**
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) **Indiana 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.7 Performance Testing [326 IAC 3-6]

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

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

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

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the Permittee submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.8 Compliance Requirements [326 IAC 2-1.1-11]

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

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

C.9 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)]

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

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

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

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

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

C.10 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

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

C.11 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.12 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

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

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

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

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

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

- (c) If the ERP is disapproved by IDEM, OAQ , the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.
- (d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.
- (e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.
- (f) Upon direct notification by IDEM, OAQ 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.13 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.14 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.15 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5][326 IAC 2-7-6]

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.

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

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

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

C.16 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) Pursuant to 326 IAC 2-6-3(a)(1), the Permittee shall submit by July 1 of each year an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:
- (1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);
 - (2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1 (32) ("Regulated pollutant, which is used only for purposes of Section 19 of this rule") from the source, for purpose of fee assessment.

The statement must be submitted to:

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

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

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

C.17 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 (as defined in 40 CFR 51.165 (a)(6)(vi)(A), 40 CFR 51.165 (a)(6)(vi)(B), 40 CFR 51.166 (r)(6)(vi)(a), and/or 40 CFR 51.166 (r)(6)(vi)(b)) that a "project" (as defined in 326 IAC 2-2-1 (qq)) at an existing emissions unit or at a source with Plant-wide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1 (ee)) and the Permittee elects to utilize the "projected actual

emissions" (as defined in 326 IAC 2-2-1 (rr) and/or IAC 2-3-1 (mm)), the Permittee shall comply with following:

- (1) Before beginning actual construction of the "project" (as defined in 326 IAC 2-2-1 (qq) and/or 326 IAC 2-3-1 (ll)) at an existing emissions unit, document and maintain the following records:
 - (A) A description of the project.
 - (B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.
 - (C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:
 - (i) Baseline actual emissions;
 - (ii) Projected actual emissions;
 - (iii) Amount of emissions excluded under section 326 IAC 2-2-1(rr)(2)(A)(iii) and/or 326 IAC 2-3-1(mm)(2)(A)(iii); and
 - (iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.
- (d) If there is a reasonable possibility (as defined in 40 CFR 51.165 (a)(6)(vi)(A) and/or 40 CFR 51.166 (r)(6)(vi)(a)) that a "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(ll)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions".
 - (1) Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any existing emissions unit identified in (1)(B) above; and
 - (2) Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity of or the potential to emit that regulated NSR pollutant at the emissions unit.

C.18 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
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or

before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.
- (f) If the Permittee is required to comply with the recordkeeping provisions of (c) in Section C- General Record Keeping Requirements for any "project" (as defined in 326 IAC 2-2-1 (qq) and/or 326 IAC 2-3-1 (ll)) at an existing emissions unit, and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ :
 - (1) The annual emissions, in tons per year, from the project identified in (c)(1) in Section C- General Record Keeping Requirements exceed the baseline actual emissions, as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(i), by a significant amount, as defined in 326 IAC 2-2-1 (xx) and/or 326 IAC 2-3-1 (qq), for that regulated NSR pollutant, and
 - (2) The emissions differ from the preconstruction projection as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(ii).
- (g) The report for project at an existing emissions unit shall be submitted within sixty (60) days after the end of the year and contain the following:
 - (1) The name, address, and telephone number of the major stationary source.
 - (2) The annual emissions calculated in accordance with (c)(2) and (3) in Section C- General Record Keeping Requirements.
 - (3) The emissions calculated under the actual-to-projected actual test stated in 326 IAC 2-2-2(d)(3) and/or 326 IAC 2-3-2(c)(3).
 - (4) Any other information that the Permittee deems fit to include in this report,

Reports required in this part shall be submitted to:

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

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

Stratospheric Ozone Protection

C.19 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 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (a) one (1) natural gas fired preheater, installed in 2007, rated at 15.8 million (MM) British thermal units (Btu) per hour, with a maximum metal throughput of 20 tons per hour, controlled by one (1) dust collector (ID No. 39-DC-4), exhausting through one (1) stack (ID No. 39-DC-4);
- (b) four (4) electric induction furnaces (ID Nos. 1, 2, 3, and 4), each installed in 1991, each capable of melting a maximum of 5 tons per hour of metal, with emissions from metal charging for each furnace controlled by one (1) dust collector (ID No. 39-DC-4), exhausting through one (1) stack (ID No. 39-DC-4);
- (c) one (1) charge handling system, installed prior to 1977, processing a maximum of 20 tons of metal per hour exhausting inside the building;
- (d) one (1) electric holding furnace, installed in 1971, with a maximum molten metal storage capacity of 20 tons; the transfer of metal from the carrier ladle to the holding furnace exhausts through one (1) stack (ID No. 36-E-24);

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

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

D.1.1 PSD Minor Limit [326 IAC 2-2]

- (a) Total PM and PM10 emissions from melting and charging for the four (4) electric induction furnaces (ID Nos. 1, 2, 3, and 4), installed in 1991, shall not exceed 0.57 and 0.33 pound per ton of metal throughput, respectively.
- (b) The throughput of metal to each of the following facilities shall not exceed 50,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month:
 - (1) all four (4) electric induction furnaces; and
 - (2) the electric holding furnace

Compliance with these emission limits and the metal throughput limit combined with the emissions increase from the charge handling operation due to the modification in 1991 limits PM and PM10 emissions from the modification in 1991 to less than 25 and 15 tons per year, respectively. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable. Any emissions from the electric holding furnace are accounted for in the emissions from melting in the electric induction furnaces.

D.1.2 Particulate [326 IAC 6-3-2]

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

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

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

where

E = rate of emission in pounds per hour; and

P = process weight rate in tons per hour

The allowable emissions for each facility are as follows:

Emission Unit ID	Process Weight (tons/hr)	Allowable Particulate Emissions (lb/hr)
Electric Induction Furnace #1	5.00	12.05
Electric Induction Furnace #2	5.00	12.05
Electric Induction Furnace #3	5.00	12.05
Electric Induction Furnace #4	5.00	12.05
Charge Handling	20.00	30.51

D.1.3 HAP Minor Limit

- (a) Emissions of lead from the four (4) electric induction furnaces (ID Nos. 1, 2, 3, and 4) shall not exceed 2.32 tons per twelve (12) consecutive month period, with compliance determined at the end of each month;
- (b) Emissions of manganese from the four (4) electric induction furnaces (ID Nos. 1, 2, 3, and 4) shall not exceed 0.66 ton per twelve (12) consecutive month period, with compliance determined at the end of each month;
- (c) Emission of any combination of HAPs from the four (4) electric induction furnaces (ID Nos. 1, 2, 3, and 4) shall not exceed 2.43 tons per twelve (12) consecutive month period, with compliance determined at the end of each month;
- (d) Emissions of lead from the charge handling system shall not exceed 0.10 ton per twelve (12) consecutive month period, with compliance determined at the end of each month;
- (e) Emissions of manganese from the charge handling system shall not exceed 0.47 ton per twelve (12) consecutive month period, with compliance determined at the end of each month;
- (f) Emissions of any combination of HAPs from the charge handling system shall not exceed 0.57 ton per twelve (12) consecutive month period, with compliance determined at the end of each month.

A summary of these limits is included in the following table:

Emission Unit	Pollutant	Emission Limit (tons/yr)
Four (4) Electric Induction Furnaces	Lead	2.32
	Manganese	0.66
	Total Metal HAPs	2.43
Charge Handling	Lead	0.10
	Manganese	0.47
	Total Metal HAPs	0.57

Compliance with the emission limits in paragraphs (a), (b), (d), and (e) above in conjunction with the other lead and manganese limits included in this permit limit source-wide lead emissions and source-wide manganese emissions to less than 10 tons per year, each. Compliance with the limits in paragraphs (c) and (f) above in conjunction with the other combined HAP limits included

in this permit limit source-wide emissions of any combination of HAPs to less than 25 tons per year.

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

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

Compliance Determination Requirements

D.1.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

- (a) During the period between 30 and 36 months after issuance of this permit, in order to demonstrate compliance with Conditions D.1.1 and D.1.2, the Permittee shall perform PM and PM-10 testing on one (1) of the four (4) identical electric induction furnaces and the dust collector (ID No. 39-DC-4) controlling emissions from the metal charging for each furnace 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 condensible PM-10. Testing shall be conducted in accordance with Section C- Performance Testing.
- (b) Within 180 days after issuance of Significant Permit Modification No. 091-20949-00020, in order to demonstrate compliance with Condition D.1.3, the Permittee shall perform lead and manganese testing on one (1) of the four (4) electric induction furnaces 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. Testing shall be conducted in accordance with Section C - Performance Testing.

D.1.6 Particulate Matter (PM) and HAPs

- (a) In order to comply with conditions D.1.1 and D.1.2 and to comply with the metallic HAP emission limits in condition D.1.3, the dust collector for PM, PM10 and metallic HAP control shall be in operation and control emissions from the metal charging for each electric induction furnace at all times when the electric induction furnaces are in operation.
- (b) In the event that bag failure is observed in a multi-compartment dust collector, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

D.1.7 HAP Emissions

Compliance with the HAP limits in condition D.1.3 shall be demonstrated using the following equations:

- (a) Lead Emissions from the four (4) electric induction furnaces (tons/yr) = $EF_{FPb} \text{ (lb/ton)} \times M_F \text{ (tons per twelve (12) consecutive month period)} \times (1 \text{ ton} / 2000 \text{ pounds})$

Where:

EF_{FPb} = 0.0545 pound lead per ton of metal throughput (or an emission factor determined from the most recent compliance stack test)

M_F = total metal throughput to the four (4) electric induction furnaces (tons per twelve (12) consecutive month period)

- (b) Lead Emissions from the charge handling operation (tons/yr) = $EF_{CHPb} \text{ (lb/ton)} \times M_{CH} \text{ (tons per twelve (12) consecutive month period)} \times (1 \text{ ton} / 2000 \text{ pounds})$

Where:

$EF_{CHPb} = 0.00231$ pound lead per ton of metal throughput (or an emission factor determined from the most recent compliance stack test)
 $M_{CH} =$ total metal throughput to the charge handling operation (tons per twelve (12) consecutive month period)

- (c) Manganese Emissions from the four (4) electric induction furnaces (tons/yr) = EF_{FMn} (lb/ton) x M_F (tons per twelve (12) consecutive month period) x (1 ton / 2000 pounds)

Where:

$EF_{FMn} = 0.02108$ pound manganese per ton of metal throughput (or an emission factor determined from the most recent compliance stack test)
 $M_F =$ total metal throughput to the four (4) electric induction furnaces (tons per twelve (12) consecutive month period)

- (d) Manganese Emissions from the charge handling operation (tons/yr) = EF_{CHMn} (lb/ton) x M_{CH} (tons per twelve (12) consecutive month period) x (1 ton / 2000 pounds)

Where:

$EF_{CHMn} = 0.0186$ pound manganese per ton of metal throughput (or an emission factor determined from the most recent compliance stack test)
 $M_{CH} =$ total metal throughput to the charge handling operation (tons per twelve (12) consecutive month period)

- (e) Total Metal HAP Emissions from the four (4) electric induction furnaces (tons/yr) = EF_{FTM} (lb/ton) x M_F (tons per twelve (12) consecutive month period) x (1 ton / 2000 pounds)

Where:

$EF_{FTM} = 0.07764$ pound combined metal HAP per ton of metal throughput (or an emission factor determined from the most recent compliance stack test)
 $M_F =$ total metal throughput to the four (4) electric induction furnaces (tons per twelve (12) consecutive month period)

- (f) Total Metal HAP Emissions from the charge handling operation (tons/yr) = EF_{CHTM} (lb/ton) x M_{CH} (tons per twelve (12) consecutive month period) x (1 ton / 2000 pounds)

Where:

$EF_{CHTM} = 0.02273$ pound combined metal HAP per ton of metal throughput (or an emission factor determined from the most recent compliance stack test)
 $M_{CH} =$ total metal throughput to the charge handling operation (tons per twelve (12) consecutive month period)

- (g) Upon IDEM approval of lead and manganese compliance stack test results on one (1) of the four (4) electric induction furnaces, the following shall apply:

- (1) The lead and manganese emission factors in pound per ton obtained from the IDEM approved stack test results shall be used for the variables identified above as EF_{FPb} and EF_{FMn} .
- (2) The total metal HAP emission factor in pound per ton that shall be used for the variable EF_{FTM} shall be the sum of the lead emission factor obtained from the stack test, the manganese emission factor obtained from the stack test and the remaining non-lead and non-manganese metal HAP emission factors used to calculate emissions.

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

D.1.8 Visible Emissions Notations

- (a) Visible emission notations of the stack exhaust for the four (4) electric induction furnaces and the metal charging system (ID No. 39-DC-4) 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.1.9 Parametric Monitoring

The Permittee shall record the pressure drop across the dust collector used in conjunction with the four (4) electric induction furnaces and the metal charging system (ID No. 39-DC-4), at least once per day when the four (4) electric induction furnaces and the metal charging system are in operation. When for any one reading, the pressure drop across the dust collector is outside the normal range of 1.0 and 7.0 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.

D.1.10 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 emission unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

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

D.1.11 Record Keeping Requirements

- (a) To document compliance with Condition D.1.1(b), the Permittee shall maintain records of the metal throughput to the four (4) electric induction furnaces and the electric holding furnace for each month;
- (b) To document compliance with Condition D.1.8, the Permittee shall maintain records of visible emission notations of the four (4) electric induction furnaces and metal charging system stack exhaust (ID No. 39-DC-4) once per day. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).
- (c) To document compliance with Condition D.1.9, the Permittee shall maintain records of the pressure drop once per day. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).
- (d) To document compliance with condition D.1.3, the Permittee shall maintain records of the following:
 - (1) HAP stack test results for one (1) of the four (4) electric induction furnaces;
 - (2) HAP emission calculations performed monthly using the equations in condition D.1.7; and
 - (3) HAP emissions in tons per year.
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.12 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.1(b) and Condition D.1.3, including supporting calculations and data used for determining compliance with the HAP emission limits in 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 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (e) one (1) mold making operation (ID No. A-Line Molding) consisting of the following:
- (1) one (1) 250 ton capacity holding silo (ID No. A-Line Holding Silo), installed in 1984, controlled by one (1) baghouse (ID No. 36-1-DC-8), exhausting through one (1) stack (ID No. 36-1-DC-8), and one (1) 50 ton capacity bond silo, installed in 1984, controlled by one (1) bin vent;
 - (2) one (1) green sand muller (ID No. A-Line Muller), installed in 1984, with a maximum green mold sand throughput of 200 tons per hour, controlled by one (1) baghouse (ID No. 36-1-DC-8), exhausting through one (1) stack (ID No. 36-1-DC-8);
 - (3) One (1) sand cooler constructed in 2008, with maximum capacity of 200 tons of sand per hour, with emissions controlled by one (1) baghouse (ID No. 36-1-DC-8) and exhausting through stack 36-1-DC-8.
 - (4) one (1) metal pouring operation (ID No. A-Line Pouring), installed in 1964, with a maximum throughput of 24 tons per hour of molten metal, and a maximum throughput of 10 tons of core sand per hour, exhausting through stack 36-E-12;
 - (5) one (1) metal cooling operation (ID No. A-Line Cooling), installed in 1964, with a maximum throughput of 24 tons per hour of molten metal, and a maximum throughput of 10 tons of core sand per hour, exhausting through exhaust fans 32-E-2 and 32-E-1; and
 - (6) one (1) mold and casting shakeout operation (ID No. A-Line Shakeout), installed in 1964, with a maximum metal casting throughput of 24 tons per hour, and a maximum throughput of 10 tons of core sand per hour, controlled by one (1) baghouse (ID No. 36-1-DC-8), exhausting through one (1) stack (ID No. 36-1-DC-8);

(The information describing the process contained in this emissions unit 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 Limit [326 IAC 2-2]

- (a) The total PM emissions from the baghouse, identified as 36-1-DC-8 controlling A-Line sand cooler, A-Line Muller and A-Line Holding Silo, shall not exceed 0.107 pound per ton of sand throughput.
- (b) The total PM10 emissions from the baghouse, identified as 36-1-DC-8 controlling the A-Line sand cooler, A-Line Muller and A-Line Holding silo, shall not exceed 0.064 pounds per ton of sand throughput.
- (c) The throughput of sand to the A-Line Muller and A-Line Holding Silo shall not exceed 464,200 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with these emission limits and the sand throughput limit, will limit PM and PM10 emissions to less than 25 and 15 tons per year, respectively. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable.

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

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

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:

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

or

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

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

The allowable emissions for each facility are as follows:

Emission Unit ID	Process Weight (tons/hr)	Allowable Particulate Emissions (lb/hr)
A-Line Pouring	234.00*	60.23
A-Line Cooling	234.00*	60.23
A-Line Shakeout	234.00*	60.23
A-Line Muller & Sand Handling (including A-Line Holding Silo and Sand Cooler)	200.00	58.51

* Includes 24 tons per hour metal, 200 tons per hour mold sand, and 10 tons per hour core throughput.

- (b) For purposes of determining compliance with the particulate emission limits pursuant to 326 IAC 6-3-2 for the A-Line Shakeout and the A-Line Muller & Sand Handling (including the A-Line Holding Silo and Sand Coller), all exhausting through baghouse 36-1-DC-8, the allowable particulate emission rate from baghouse 36-1-DC-8 shall be limited to 118.74 pounds per hour.

D.2.3 Metallic HAP Minor Limit

- (a) Total emissions of lead from the A-Line Pouring, Cooling, and Shakeout operations shall not exceed 1.10 tons per twelve (12) consecutive month period, with compliance determined at the end of each month;
- (b) Total emissions of manganese from the A-Line Pouring, Cooling, and Shakeout operations shall not exceed 3.04 tons per twelve (12) consecutive month period, with compliance determined at the end of each month;
- (c) Total emissions of any combination of metal HAPs from the A-Line Pouring, Cooling, and Shakeout operations shall not exceed 3.71 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

A summary of these limits is included in the following table:

Emission Unit	Pollutant	Emission Limit (tons/yr)
A-Line Pouring, Cooling and Shakeout	Lead	1.10
	Manganese	3.04
	Total Metal HAPs	3.71

Compliance with the emission limits in paragraphs (a) and (b) above in conjunction with the other

lead and manganese limits included in this permit limit source-wide lead emissions and source-wide manganese emissions to less than 10 tons per year, each. Compliance with the limit in paragraph (c) above in conjunction with the other combined HAP limits included in this permit limit source-wide emissions of any combination of HAPs to less than 25 tons per year.

D.2.4 Organic HAP Minor Limit

- (a) Emissions of phenol from the A-Line Pouring, Cooling and Shakeout operations and the B-Line Pouring, Cooling and Shakeout operations (listed in section D.3) combined shall not exceed 1.85 tons per twelve (12) consecutive month period, with compliance determined at the end of each month;
- (b) Emissions of benzene from the A-Line Pouring, Cooling and Shakeout operations and the B-Line Pouring, Cooling and Shakeout operations (listed in section D.3) combined shall not exceed 2.41 tons per twelve (12) consecutive month period, with compliance determined at the end of each month;
- (c) Emissions of any combination of organic HAPs from the A-Line Pouring, Cooling and Shakeout operations and the B-Line Pouring, Cooling and Shakeout operations (listed in section D.3) combined shall not exceed 2.41 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

A summary of these limits is included in the following table:

Emission Unit	Pollutant	Emission Limit (tons/yr)
A-Line and B-Line Pouring, Cooling and Shakeout	Phenol	1.85
	Benzene	2.41
	Total Organic HAPs	2.41

Compliance with the emission limits in paragraphs (a) and (b) above in conjunction with the other phenol and benzene limits included in this permit limit source-wide phenol emissions and source-wide benzene emissions to less than 10 tons per year, each. Compliance with the limit in paragraph (c) above in conjunction with the other combined HAP limits included in this permit limit source-wide emissions of any combination of HAPs to less than 25 tons per year.

D.2.5 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.2.6 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

- (a) During the period between 30 and 36 months after issuance of this permit, in order to demonstrate compliance with Condition D.2.2, the Permittee shall perform PM testing on the A-Line Pouring operation, the baghouse controlling the A-Line Shakeout operation, the A-Line Holding Silo, and the A-Line Muller, identified as 36-1-DC-8, 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. Testing shall be conducted in accordance with Section C- Performance Testing.
- (b) Within 180 days after issuance of Significant Permit Modification No. 091-20949-00020, in order to demonstrate compliance with Condition D.2.4, the Permittee shall perform total organic HAP testing on the A-Line Pouring, A-Line Cooling, and A-Line Shakeout operations and total metal HAP testing on the A-Line Shakeout operation 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. Testing shall be conducted in accordance with Section C - Performance Testing.

D.2.7 Particulate Matter (PM) and HAPs

- (a) In order to comply with Conditions D.2.1, D.2.2, and D.2.3, the baghouse (ID 36-1-DC-8) for PM, PM10, and metallic HAP control shall be in operation and control emissions from the A-Line Shakeout operation and the A-Line Holding Silo, Sand Cooler and Muller at all times that the A-Line Shakeout operation and the A-Line Holding Silo, Sand Cooler and Muller are in operation.
- (b) In the event that bag failure is observed in a multi-compartment dust collector, 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.2.8 HAP Emissions

- (a) Compliance with the metal HAP limits in condition D.2.3 shall be demonstrated using the following equations:

- (1) Lead Emissions from the A-Line Pouring, Cooling, and Shakeout operations (tons/yr) = $[EF_{APPb} \text{ (lb/ton)} \times M_{AP} \text{ (tons per twelve (12) consecutive month period)}] + [EF_{ACPb} \text{ (lb/ton)} \times M_{AC} \text{ (tons per twelve (12) consecutive month period)}] + [EF_{ASpb} \text{ (lb/ton)} \times M_{AS} \text{ (tons per twelve (12) consecutive month period)}] \times (1 \text{ ton} / 2000 \text{ pounds})$

Where:

EF_{APPb} = 0.00385 pound lead per ton of metal throughput (or an emission factor determined from the most recent compliance stack test)

M_{AP} = total metal throughput to the A-Line Pouring operation (tons per twelve (12) consecutive month period)

EF_{ACPb} = 0.00539 pound lead per ton of metal throughput (or an emission factor determined from the most recent compliance stack test)

M_{AC} = total metal throughput to the A-Line Cooling operation (tons per twelve (12) consecutive month period)

EF_{ASpb} = 0.00134 pound lead per ton of metal throughput (or an emission factor determined from the most recent compliance stack test)

M_{AS} = total metal throughput to the A-Line Shakeout operation (tons per twelve (12) consecutive month period)

- (2) Manganese Emissions from the A-Line Pouring, Cooling, and Shakeout operations (tons/yr) = $[EF_{APMn} \text{ (lb/ton)} \times M_{AP} \text{ (tons per twelve (12) consecutive month period)}] + [EF_{ACMn} \text{ (lb/ton)} \times M_{AC} \text{ (tons per twelve (12) consecutive month period)}] + [EF_{ASMn} \text{ (lb/ton)} \times M_{AS} \text{ (tons per twelve (12) consecutive month period)}] \times (1 \text{ ton} / 2000 \text{ pounds})$

Where:

EF_{APMn} = 0.031 pound manganese per ton of metal throughput (or an emission factor determined from the most recent compliance stack test)

M_{AP} = total metal throughput to the A-Line Pouring operation (tons per twelve (12) consecutive month period)

EF_{ACMn} = 0.0434 pound manganese per ton of metal throughput (or an emission factor determined from the most recent compliance stack test)

M_{AC} = total metal throughput to the A-Line Cooling operation (tons per twelve (12) consecutive month period)

- (12) consecutive month period)
- $$EF_{ASMn} = 0.0108 \text{ pound manganese per ton of metal throughput (or an emission factor determined from the most recent compliance stack test)}$$
- $$M_{AS} = \text{total metal throughput to the A-Line Shakeout operation (tons per twelve (12) consecutive month period)}$$
- (3) Total Metal HAP Emissions from the A-Line Pouring, Cooling, and Shakeout operations (tons/yr) = $[EF_{APTm} \text{ (lb/ton)} \times M_{AP} \text{ (tons per twelve (12) consecutive month period)}] + [EF_{ACTm} \text{ (lb/ton)} \times M_{AC} \text{ (tons per twelve (12) consecutive month period)}] + [EF_{ASTm} \text{ (lb/ton)} \times M_{AS} \text{ (tons per twelve (12) consecutive month period)}]$ x (1 ton / 2000 pounds)

Where:

- $$EF_{APTm} = 0.03788 \text{ pound combined metal HAP per ton of metal throughput (or an emission factor determined from the most recent compliance stack test)}$$
- $$M_{AP} = \text{total metal throughput to the A-Line Pouring operation (tons per twelve (12) consecutive month period)}$$
- $$EF_{ACTm} = 0.053 \text{ pound combined metal HAP per ton of metal throughput (or an emission factor determined from the most recent compliance stack test)}$$
- $$M_{AC} = \text{total metal throughput to the A-Line Cooling operation (tons per twelve (12) consecutive month period)}$$
- $$EF_{ASTm} = 0.0132 \text{ pound combined metal HAP per ton of metal throughput (or an emission factor determined from the most recent compliance stack test)}$$
- $$M_{AS} = \text{total metal throughput to the A-Line Shakeout operation (tons per twelve (12) consecutive month period)}$$

- (b) Compliance with the organic HAP limits in condition D.2.4 shall be demonstrated using the following equations:

- (1) Phenol Emissions from the A-Line Pouring, Cooling, and Shakeout operations (tons/yr) = $[EF_{APh} \text{ (lb/lb)} \times R_{CBA} \text{ (pounds per twelve (12) consecutive month period)} \times (1 \text{ ton} / 2000 \text{ pounds})] + 0.131 \text{ ton per year phenol from the green sand molding operation for molds used in the A-Line}$

Where:

- $$EF_{APh} = 0.0039 \text{ pound phenol per pound of Cold Box resin used (or an emission factor determined from the most recent compliance stack test)}$$
- $$R_{CBA} = \text{total resin usage in the Cold Box core making operation for cores used in the A-Line (pounds per twelve (12) consecutive month period)}$$

- (2) Benzene Emissions from the A-Line Pouring, Cooling, and Shakeout operations (tons/yr) = $[EF_{AB} \text{ (lb/lb)} \times R_{CBA} \text{ (pounds per twelve (12) consecutive month period)} \times (1 \text{ ton} / 2000 \text{ pounds})] + 0.611 \text{ ton per year benzene from the green sand molding operation for molds used in the A-Line}$

Where:

- $$EF_{AB} = 0.00535 \text{ pound benzene per pound of Cold Box resin used (or an emission factor determined from the most recent compliance stack test)}$$
- $$R_{CBA} = \text{total resin usage in the Cold Box core making operation for cores used in the A-Line (pounds per twelve (12) consecutive month period)}$$

- (3) Total Organic HAP Emissions from the A-Line Pouring, Cooling, and Shakeout operations (tons/yr) = $[EF_{ATO} \text{ (lb/lb)} \times R_{CBA} \text{ (pounds per twelve (12) consecutive month period)} \times (1 \text{ ton} / 2000 \text{ pounds})] + 1.076 \text{ tons per year from the green sand molding operation for molds used in the A-Line}$

Where:

$EF_{ATO} = 0.01236$ pound combined organic HAP per pound of Cold Box resin used (or an emission factor determined from the most recent compliance stack test)

$R_{CBA} =$ total resin usage in the Cold Box core making operation for cores used in the A-Line (pounds per twelve (12) consecutive month period)

- (c) Upon IDEM approval of total metallic HAP compliance stack test results on the A-Line Pouring, Cooling and Shakeout operations, the lead, manganese, and total metallic HAP emission factors in pound per ton obtained from the IDEM approved stack test results shall be used for the variables identified above as EF_{APPb} , EF_{ACPB} , EF_{ASPB} , EF_{APMn} , EF_{ACMn} , EF_{ASMn} , EF_{APTM} , EF_{ACTM} , and EF_{ASTM} .
- (d) Upon IDEM approval of total organic HAP compliance stack test results on the A-Line Pouring, Cooling and Shakeout operations, the phenol, benzene and total organic HAP emission factors in pound per pound obtained from the IDEM approved stack test results shall be used for the variables identified above as EF_{APh} , EF_{AB} and EF_{ATO} .

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

D.2.9 Visible Emissions Notations

- (a) Visible emission notations of the A-Line pouring and cooling operations and the stack exhaust for the baghouse (ID 36-1-DC-8) controlling the A-Line Holding Silo, Sand Cooler and Muller, and the A-Line Shakeout operation 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.2.10 Parametric Monitoring

The Permittee shall record the pressure drop across the baghouse used in conjunction with the A-Line Shakeout operation and the A-Line Holding Silo, Sand Cooler and Muller, at least once per day when the A-Line Shakeout operation and the A-Line Holding Silo, Sand Cooler and Muller are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 2.0 and 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 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.

D.2.11 Broken or Failed Bag Detection

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

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

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

D.2.12 Record Keeping Requirements

- (a) To document compliance with Condition D.2.1(b), the Permittee shall maintain records of the sand throughput to the A-Line Muller, Sand Cooler and A-Line Holding Silo for each month;
- (b) To document compliance with Condition D.2.9, the Permittee shall maintain records of visible emission notations of the A-Line pouring and cooling operations and the stack exhaust for the baghouse controlling the A-Line Holding Silo, Sand Cooler and Muller, and the A-Line Shakeout operation once per day. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).
- (c) To document compliance with Condition D.2.10, the Permittee shall maintain records of the pressure drop once per day. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).
- (d) To document compliance with Condition D.2.3, the Permittee shall maintain records of the following:
 - (1) tons of metal throughput to each of the A-Line Pouring, Cooling, and Shakeout operations for each month;
 - (2) Metallic HAP stack test results for the A-Line Pouring, Cooling, and Shakeout operations as applicable;
 - (3) Metallic HAP emission calculations performed monthly using the equations in condition D.2.8(a); and
 - (4) Metallic HAP emissions in tons per year.
- (e) To document compliance with Condition D.2.4, the Permittee shall maintain records of the following:
 - (1) pounds of resin used in the Cold Box core making operation for cores used in the A-Line for each month;
 - (2) Organic HAP stack test results for the A-Line Pouring, Cooling, and Shakeout operations;

- (3) Organic HAP emission calculations performed monthly using the equations in condition D.2.8(b); and
 - (4) Organic HAP emissions in tons per year.
- (f) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.2.13 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.2.1(b), D.2.3, and D.2.4, including supporting calculations and data used for determining compliance with the HAP emission limits in conditions D.2.3 and D.2.4, 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 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (f) one (1) mold making operation (ID No. B-Line Molding) consisting of the following:
- (1) one (1) 75 ton capacity holding silo (ID No. B-Line Holding Silo), installed in 1987, controlled by one (1) baghouse (ID No. 36-1-DC-7), exhausting through one (1) stack (ID No. 36-1-DC-7), and one (1) 50 ton capacity bond silo, installed in 1987, controlled by one (1) bin vent;
 - (2) one (1) green sand muller (ID No. B-Line Muller), installed in 1987, with a maximum green mold sand throughput of 100 tons per hour, controlled by one (1) baghouse (ID No. 36-1-DC-7), exhausting through one (1) stack (ID No. 36-1-DC-7);
 - (3) one (1) metal pouring operation (ID No. B-Line Pouring), installed in 1986, with a maximum throughput of 9 tons per hour of molten metal, and a maximum throughput of 4 tons of core sand per hour, exhausting through stack 36-E-5;
 - (4) one (1) metal cooling operation (ID No. B-Line Cooling), installed in 1986, with a maximum throughput of 9 tons per hour of molten metal, and a maximum throughput of 4 tons of core sand per hour, exhausting partially through stack 36-E-6; and
 - (5) one (1) mold shakeout operation (ID No. B-Line Shakeout), installed in 1987, with a maximum metal casting throughput of 9 tons per hour, and a maximum throughput of 4 tons of core sand per hour, controlled by one (1) baghouse (ID No. 36-1-DC-7), exhausting through one (1) stack (ID No. 36-1-DC-7);

(The information describing the process contained in this emissions unit 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 throughput of metal to each of the B-Line Pouring, B-Line Cooling, and B-Line Shakeout operations, installed in a twelve month period from 1986 to 1987, shall not exceed 31,500 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (b) The throughput of sand to the B-Line Muller and the B-Line Holding Silo shall not exceed 130,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (c) Total PM emissions from the baghouse (36-1-DC-7) controlling the B-Line Shakeout operation, the B-Line Muller, and the B-Line Holding Silo shall not exceed 0.37 pound per ton of metal and sand throughput.
- (d) Total CO emissions from the B-Line Pouring, B-Line Cooling and B-Line Shakeout operations shall not exceed 6.0 pounds per ton of metal throughput.

Compliance with the metal throughput limit, the sand throughput limit, and the PM emission limit, when combined with the emission reductions from the removal of an existing floor molding operation in 1986, limits PM emissions to less than 25 tons per year. Compliance with the metal throughput limit and the CO emission limit shall limit CO emissions from the B-Line Pouring, Cooling and Shakeout operations installed in the twelve month period from 1986 to 1987 to less than 100 tons per year. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable.

D.3.2 Particulate [326 IAC 6-3-2]

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

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:

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

or
 Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour; and } P = \text{process weight rate in tons per hour}$$

The allowable emissions for each facility are as follows:

Emission Unit ID	Process Weight (tons/hr)	Allowable Particulate Emissions (lb/hr)
B-Line Pouring	113.00*	52.51
B-Line Cooling	113.00*	52.51
B-Line Shakeout	113.00*	52.51
B-Line Muller & Sand Handling (including B-Line Holding Silo)	100.00	51.28

* Includes 9 tons per hour metal, 100 tons per hour mold sand, and 4 tons per hour core throughput.

- (b) For purposes of demonstrating compliance with the particulate emission limits pursuant to 326 IAC 6-3-2 for the B-Line Shakeout and the B-Line Muller & Sand Handling (including the B-Line Holding Silo), and the Cold Box sand mixer, the Cold Box sand hopper and elevator, the No Bake sand hopper, the Warm Box mixers, and the Warm Box sand hopper listed in section D.7, all of which are controlled by the baghouse identified as 36-1-DC-7, the allowable particulate emission rate from the baghouse, identified as 36-1-DC-7, shall be limited to 142.77 pounds per hour.

D.3.3 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

- (a) VOC emissions from the B-Line Pouring operation shall not exceed 0.14 pounds of VOC per ton of metal charged;
- (b) VOC emissions from the B-Line Shakeout operation shall not exceed 1.2 pounds of VOC per ton of metal charged;
- (c) The throughput of metal to each of the B-Line Pouring and B-Line Shakeout operations shall not exceed 31,500 tons per twelve (12) consecutive month period.

Compliance with the metal throughput limit and the VOC emission limits shall limit VOC emissions to less than 25 tons per year. Therefore, the requirements of 326 IAC 8-1-6 (New Facilities, General Reduction Requirements) do not apply.

D.3.4 Metallic HAP Minor Limit

- (a) Total emissions of lead from the B-Line Pouring, Cooling, and Shakeout operations shall not exceed 0.65 ton per twelve (12) consecutive month period, with compliance determined at the end of each month;
- (b) Total emissions of manganese from the B-Line Pouring, Cooling, and Shakeout operations shall not exceed 1.36 ton per twelve (12) consecutive month period, with compliance determined at the end of each month;
- (c) Total emissions of any combination of metal HAPs from the B-Line Pouring, Cooling, and Shakeout operations shall not exceed 1.67 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

A summary of these limits is included in the following table:

Emission Unit	Pollutant	Emission Limit (ton/yr)
B-Line Pouring, Cooling and Shakeout	Lead	0.65
	Manganese	1.36
	Total Metal HAPs	1.67

Compliance with the emission limits in paragraphs (a) and (b) above in conjunction with the other lead and manganese limits included in this permit limit source-wide lead emissions and source-wide manganese emissions to less than 10 tons per year, each. Compliance with the limit in paragraph (c) above in conjunction with the other combined HAP limits included in this permit limit source-wide emissions of any combination of HAPs to less than 25 tons per year.

D.3.5 Organic HAP Minor Limit

- (a) Emissions of phenol from the A-Line Pouring, Cooling and Shakeout operations (listed in section D.2) and the B-Line Pouring, Cooling and Shakeout operations combined shall not exceed 1.85 tons per twelve (12) consecutive month period, with compliance determined at the end of each month;
- (b) Emissions of benzene from the A-Line Pouring, Cooling and Shakeout operations (listed in section D.2) and the B-Line Pouring, Cooling and Shakeout operations combined shall not exceed 2.41 tons per twelve (12) consecutive month period, with compliance determined at the end of each month;
- (c) Emissions of any combination of organic HAPs from the A-Line Pouring, Cooling and Shakeout operations (listed in section D.2) and the B-Line Pouring, Cooling and Shakeout operations combined shall not exceed 2.41 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

A summary of these limits is included in the following table:

Emission Unit	Pollutant	Emission Limit (lb/lb)
A-Line and B-Line Pouring, Cooling and Shakeout	Phenol	1.85
	Benzene	2.41
	Total Organic HAPs	2.41

Compliance with the emission limits in paragraphs (a) and (b) above in conjunction with the other phenol and benzene limits included in this permit limit source-wide phenol emissions and source-wide benzene emissions to less than 10 tons per year, each. Compliance with the limit in paragraph (c) above in conjunction with the other combined HAP limits included in this permit limit source-wide emissions of any combination of HAPs to less than 25 tons per year.

D.3.6 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.3.7 Particulate Matter (PM) and HAPs

- (a) In order to comply with Conditions D.3.1 and D.3.2, the baghouse for PM control shall be in operation and control emissions from the B-Line Shakeout operation and the B-Line Holding Silo and Muller at all times that the B-Line Shakeout operation and the B-Line Holding Silo and Muller are in operation.
- (b) In order to comply with Condition D.3.4, the baghouse for PM and metallic HAP control shall be in operation and control emissions from the B-Line Shakeout operation at all times that the B-Line Shakeout operation is in operation.
- (c) In the event that bag failure is observed in a multi-compartment dust collector, 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.3.8 HAP Emissions

- (a) Compliance with the metal HAP limits in condition D.3.4 shall be demonstrated using the following equations:
- (1) Lead Emissions from the B-Line Pouring, Cooling, and Shakeout operations (tons/yr) = $[EF_{BPPb} \text{ (lb/ton)} \times M_{BP} \text{ (tons per twelve (12) consecutive month period)}] + [EF_{BCPb} \text{ (lb/ton)} \times M_{BC} \text{ (tons per twelve (12) consecutive month period)}] + [EF_{BSPb} \text{ (lb/ton)} \times M_{BS} \text{ (tons per twelve (12) consecutive month period)}] \times (1 \text{ ton} / 2000 \text{ pounds})$

Where:

EF_{BPPb} = 0.01617 pound lead per ton of metal throughput (or an emission factor determined from the most recent compliance stack test)

M_{BP} = total metal throughput to the B-Line Pouring operation (tons per twelve (12) consecutive month period)

EF_{BCPb} = 0.00539 pound lead per ton of metal throughput (or an emission factor determined from the most recent compliance stack test)

M_{BC} = total metal throughput to the B-Line Cooling operation (tons per twelve (12) consecutive month period)

EF_{BSPb} = 0.00256 pound lead per ton of metal throughput (or an emission factor determined from the most recent compliance stack test)

M_{BS} = total metal throughput to the B-Line Shakeout operation (tons per twelve (12) consecutive month period)

- (2) Manganese Emissions from the B-Line Pouring, Cooling, and Shakeout operations (tons/yr) = $[EF_{BPMn} \text{ (lb/ton)} \times M_{BP} \text{ (tons per twelve (12) consecutive month period)}] + [EF_{BCMn} \text{ (lb/ton)} \times M_{BC} \text{ (tons per twelve (12) consecutive month period)}] + [EF_{BSMn} \text{ (lb/ton)} \times M_{BS} \text{ (tons per twelve (12) consecutive month period)}]$ x (1 ton / 2000 pounds)

Where:

EF_{BPMn} = 0.1302 pound manganese per ton of metal throughput (or an emission factor determined from the most recent compliance stack test)

M_{BP} = total metal throughput to the B-Line Pouring operation (tons per twelve (12) consecutive month period)

EF_{BCMn} = 0.0434 pound manganese per ton of metal throughput (or an emission factor determined from the most recent compliance stack test)

M_{BC} = total metal throughput to the B-Line Cooling operation (tons per twelve (12) consecutive month period)

EF_{BSMn} = 0.0206 pound manganese per ton of metal throughput (or an emission factor determined from the most recent compliance stack test)

M_{BS} = total metal throughput to the B-Line Shakeout operation (tons per twelve (12) consecutive month period)

- (3) Total Metal HAP Emissions from the B-Line Pouring, Cooling, and Shakeout operations (tons/yr) = $[EF_{BPTM} \text{ (lb/ton)} \times M_{BP} \text{ (tons per twelve (12) consecutive month period)}] + [EF_{BCTM} \text{ (lb/ton)} \times M_{BC} \text{ (tons per twelve (12) consecutive month period)}] + [EF_{BSTM} \text{ (lb/ton)} \times M_{BS} \text{ (tons per twelve (12) consecutive month period)}]$ x (1 ton / 2000 pounds)

Where:

EF_{BPTM} = 0.1591 pound combined metal HAP per ton of metal throughput (or an emission factor determined from the most recent compliance stack test)

M_{BP} = total metal throughput to the B-Line Pouring operation (tons per twelve (12) consecutive month period)

EF_{BCTM} = 0.053 pound combined metal HAP per ton of metal throughput (or an emission factor determined from the most recent compliance stack test)

M_{BC} = total metal throughput to the B-Line Cooling operation (tons per twelve (12) consecutive month period)

EF_{BSTM} = 0.0252 pound combined metal HAP per ton of metal throughput (or an emission factor determined from the most recent compliance stack test)

M_{BS} = total metal throughput to the B-Line Shakeout operation (tons per twelve (12) consecutive month period)

- (b) Compliance with the organic HAP limits in condition D.3.5 shall be demonstrated using the following equations:

- (1) Phenol Emissions from the B-Line Pouring, Cooling, and Shakeout operations (tons/yr) = $[EF_{BPh} \text{ (lb/lb)} \times R_{CBB} \text{ (pounds per twelve (12) consecutive month period)}] \times (1 \text{ ton} / 2000 \text{ pounds}) + 0.043 \text{ ton per year}$ from the green sand molding operation for molds used in the B-Line

Where:

EF_{BPh} = 0.0039 pound phenol per pound of Cold Box resin used (or an emission factor determined from the most recent compliance stack test)

R_{CBB} = total resin usage in the Cold Box core making operation for cores used in the B-Line (pounds per twelve (12) consecutive month period)

- (2) Benzene Emissions from the B-Line Pouring, Cooling, and Shakeout operations (tons/yr) = $[EF_{BB} \text{ (lb/lb)} \times R_{CBB} \text{ (pounds per twelve (12) consecutive month period)} \times (1 \text{ ton} / 2000 \text{ pounds})] + 0.199 \text{ ton per year}$ from the green sand molding operation for molds used in the B-Line

Where:

- EF_{BB} = 0.00535 pound benzene per pound of Cold Box resin used (or an emission factor determined from the most recent compliance stack test)
 R_{CBB} = total resin usage in the Cold Box core making operation for cores used in the B-Line (pounds per twelve (12) consecutive month period)

- (3) Total Organic HAP Emissions from the B-Line Pouring, Cooling, and Shakeout operations (tons/yr) = $[EF_{BTO} \text{ (lb/lb)} \times R_{CBB} \text{ (pounds per twelve (12) consecutive month period)} \times (1 \text{ ton} / 2000 \text{ pounds})] + 0.35 \text{ ton per year}$ from the green sand molding operation for molds used in the B-Line

Where:

- EF_{BTO} = 0.01236 pound combined organic HAP per pound of Cold Box resin used (or an emission factor determined from the most recent compliance stack test)
 R_{CBB} = total resin usage in the Cold Box core making operation for cores used in the B-Line (pounds per twelve (12) consecutive month period)

- (c) Upon IDEM approval of total metallic HAP compliance stack test results on the A-Line Pouring, Cooling and Shakeout operations listed in section D.2, the lead, manganese, and total metallic HAP emission factors in pound per ton obtained from the IDEM approved stack test results shall be used for the variables identified above as EF_{BPPb} , EF_{BCPb} , EF_{BSPb} , EF_{BPMn} , EF_{BCMn} , EF_{BSMn} , EF_{BPTM} , EF_{BCTM} , and EF_{BSTM} .
- (d) Upon IDEM approval of total organic HAP compliance stack test results on the A-Line Pouring, Cooling and Shakeout operations listed in section D.2, the phenol, benzene and total organic HAP emission factors in pound per pound obtained from the IDEM approved stack test results shall be used for the variables identified above as EF_{BPh} , EF_{BB} and EF_{BTO} .

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

D.3.9 Visible Emissions Notations

- (a) Visible emission notations of the B-Line pouring operation and the stack exhaust for the baghouse controlling the B-Line Holding Silo and Muller, and the B-Line Shakeout operation 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.3.10 Parametric Monitoring

The Permittee shall record the pressure drop across the baghouse used in conjunction with the B-Line Shakeout operation and the B-Line Holding Silo and Muller, at least once per day when the B-Line Shakeout operation and the B-Line Holding Silo and Muller are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 2.0 and 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 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.

D.3.11 Broken or Failed Bag Detection

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

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

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

D.3.12 Record Keeping Requirements

- (a) To document compliance with Condition D.3.1(a) and (b) and D.3.3(c), the Permittee shall maintain records of the metal throughput to each of the B-Line Pouring, B-Line Cooling, and B-Line Shakeout operations and the sand throughput to the B-Line Muller for each month;
- (b) To document compliance with Condition D.3.9, the Permittee shall maintain records of visible emission notations of the B-Line pouring operation and the stack exhaust for the baghouse controlling the B-Line Holding Silo and Muller, and the B-Line Shakeout operation once per day. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

- (c) To document compliance with Condition D.3.10, the Permittee shall maintain records of the pressure drop once per day. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).
- (d) To document compliance with Condition D.3.4, the Permittee shall maintain records of the following:
 - (1) tons of metal throughput to each of the B-Line Pouring, Cooling, and Shakeout operations for each month;
 - (2) Metallic HAP stack test results for the A-Line Pouring, Cooling, and Shakeout operations as applicable;
 - (3) Metallic HAP emission calculations performed monthly using the equations in condition D.3.8(a); and
 - (4) Metallic HAP emissions in tons per year.
- (e) To document compliance with Condition D.3.5, the Permittee shall maintain records of the following:
 - (1) pounds of resin used in the Cold Box core making operation for cores used in the B-Line for each month;
 - (2) Organic HAP stack test results for the A-Line Pouring, Cooling, and Shakeout operations;
 - (3) Organic HAP emission calculations performed monthly using the equations in condition D.3.8(b); and
 - (4) Organic HAP emissions in tons per year.
- (f) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.3.13 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.3.1(a) and (b), D.3.3(c), D.3.4 and D.3.5, including supporting calculations and data used for determining compliance with the HAP emission limits in conditions D.3.4 and D.3.5, 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 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (g) one (1) mold making operation (ID No. Floor Molding) consisting of the following:
 - (1) one (1) High Speed Continuous Sand Mixer (ID Mixer) and associated High Speed Continuous Sand Mixer hopper, each installed in 2001, with a maximum mold sand throughput of 42 tons per hour, with the hopper controlled by one (1) baghouse (ID 30-DC-6), exhausting through one (1) stack (ID No. 30-DC-6).
 - (2) one (1) metal pouring operation (ID No. Floor Pouring), installed in 1922, with a maximum throughput of 6 tons per hour of molten metal, a maximum throughput of 3 tons of core sand per hour, and a maximum throughput of 26 tons of mold sand per hour, exhausting inside the building;
 - (3) one (1) metal cooling operation (ID No. Floor Cooling), installed in 1922, with a maximum throughput of 6 tons per hour of molten metal, a maximum throughput of 3 tons of core sand per hour, and a maximum throughput of 26 tons of mold sand per hour, exhausting inside the building;
 - (4) one (1) mold shakeout operation (ID No. Floor Shakeout), installed in 1922, with a maximum metal casting throughput of 6 tons per hour, a maximum throughput of 3 tons of core sand per hour, and a maximum throughput of 26 tons of mold sand per hour. The Floor Shakeout is uncontrolled and exhausts inside the building;
- (h) one (1) casting knockout station (ID Floor Knockout Station), installed in 1965, with a maximum throughput of 15 tons of iron castings per hour, controlled by one (1) baghouse (ID No. 8-DC-2), exhausting inside the building.
- (i) one (1) Wheelabrator shot blast machine (ID No. Shot Blast), installed in 1990, with a maximum throughput of 31 tons of iron castings per hour, controlled by one (1) baghouse (ID No. 36-DC-8), exhausting inside the building;

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

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

D.4.1 PSD Minor Limit [326 IAC 2-2]

- (a) Total PM and PM10 emissions from the Wheelabrator shot blast machine, installed in 1990, shall not exceed 0.70 and 0.42 pound per ton of metal throughput, respectively.
- (b) The throughput of metal to the Wheelabrator shot blast machine shall not exceed 71,200 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (c) The total PM and PM10 emissions from the High Speed Continuous Sand Mixer, constructed in 2001, and its associated sand hopper, constructed in 2001, that is controlled by the baghouse identified as 30-DC-6 that exhausts through stack ID No. 30-DC-6, shall not exceed 0.01 and 0.01 pound per ton of sand throughput, respectively.
- (d) The throughput of sand to the High Speed Continuous Sand Mixer (ID Mixer), constructed in 2001, shall be limited to a maximum of 42,574 tons of sand per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (e) The resin usage for the High Speed Continuous Sand Mixer (ID Mixer) shall not exceed 471,789 pounds of resin per 12 consecutive month period, with compliance determined at the end of each month.

- (f) The VOC emissions from the High Speed Continuous Sand Mixer (ID Mixer) shall not exceed 0.05 pound per pound of resin.
- (g) Catalyst usage for the High Speed Continuous Sand Mixer shall not exceed 26,211 pounds of VOC catalyst per 12 consecutive month period, with compliance determined at the end of each month.

For the emission unit installed in 1990, compliance with the emission limits in paragraph (a) above and the metal throughput limit in paragraph (b) limits total PM and PM10 emissions to less than 25 and 15 tons per year, respectively. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable.

For the High Speed Continuous Sand Mixer, its associated hopper, and the indoor scrap handling system (listed in section D.6), all installed in 2001, compliance with the PM and PM10 emission limits in paragraph (c) above, the sand throughput limit in paragraph (d) above, and the resin and catalyst usage limits and VOC emission limit in paragraphs (e), (f) and (g) above limits PM, PM10, and VOC emissions to less than 25, 15, and 40 tons per year, respectively. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable.

D.4.2 Particulate [326 IAC 6-3-2]

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

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:

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

or

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

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

The allowable emissions for each facility are as follows:

Emission Unit ID	Process Weight (tons/hr)	Allowable Particulate Emissions (lb/hr)
Floor Pouring	35.00*	41.32
Floor Cooling	35.00*	41.32
Floor Shakeout	35.00*	41.32
Knockout Station	15.00	25.16
High Speed Continuous Mixer & Floor Sand Handling	42.00	42.97
Wheelabrator Shot Blast	31.00	40.24

* Includes 6 tons per hour metal, 26 tons per hour mold sand, and 3 tons per hour core throughput.

D.4.3 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

In order to render the requirements of 326 IAC 8-1-6 (BACT) not applicable, the following conditions shall apply:

- (a) The resin usage for the High Speed Continuous Sand Mixer (ID Mixer) shall not exceed 471,789 pounds of resin per 12 consecutive month period, with compliance determined at the end of each month.
- (b) The VOC emissions from the High Speed Continuous Sand Mixer (ID Mixer) shall not exceed 0.05 pound per pound of resin.
- (c) Catalyst usage for the High Speed Continuous Sand Mixer shall not exceed 26,211 pounds of VOC catalyst per 12 consecutive month period, with compliance determined at the end of each month.

Compliance with the resin and catalyst usage limits and the VOC emission limit in paragraphs (a), (b) and (c) above will limit VOC emissions from the High Speed Continuous Sand Mixer to less than 25 tons per year. Therefore, the requirements of 326 IAC 8-1-6 (New Facilities, General Reduction Requirements) do not apply.

D.4.4 Metallic HAP Minor Limit

- (a) Total emissions of lead from the Floor Pouring, Cooling, Shakeout, and Knockout operations shall not exceed 0.83 ton per twelve (12) consecutive month period, with compliance determined at the end of each month;
- (b) Total emissions of manganese from the Floor Pouring, Cooling, Shakeout, and Knockout operations shall not exceed 0.93 tons per twelve (12) consecutive month period, with compliance determined at the end of each month;
- (c) Total emissions of any combination of metal HAPs from the Floor Pouring, Cooling, Shakeout, and Knockout operations shall not exceed 1.14 tons per twelve (12) consecutive month period, with compliance determined at the end of each month;
- (d) Emissions of lead from the Wheelabrator shot blast machine shall not exceed 3.52 tons per twelve (12) consecutive month period, with compliance determined at the end of each month;
- (e) Emissions of manganese from the Wheelabrator shot blast machine shall not exceed 3.00 tons per twelve (12) consecutive month period, with compliance determined at the end of each month;
- (f) Emission of any combination of metal HAPs from the Wheelabrator shot blast machine shall not exceed 3.52 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

A summary of these limits is included in the following table:

Emission Unit	Pollutant	Emission Limit (ton/yr)
Floor Pouring, Cooling, Shakeout and Knockout	Lead	0.83
	Manganese	0.93
	Total HAPs	1.14
Wheelabrator Shot Blast Machine	Lead	3.52
	Manganese	3.00
	Total HAPs	3.52

Compliance with the emission limits in paragraphs (a), (b), (d) and (e) above in conjunction with the other lead and manganese limits included in this permit limit source-wide lead emissions and source-wide manganese emissions to less than 10 tons per year, each. Compliance with the limits in paragraphs (c) and (f) above in conjunction with the other combined HAP limits included in this permit limit source-wide emissions of any combination of HAPs to less than 25 tons per year.

D.4.5 Organic HAP Minor Limit

- (a) The total emissions of xylene from the High Speed Continuous Sand Mixer shall not exceed 0.90 tons per twelve (12) consecutive month period, with compliance determined at the end of each month;
- (b) The total emissions of any combination of organic HAPs from the High Speed Continuous Sand Mixer shall not exceed 0.90 ton per twelve (12) consecutive month period, with compliance determined at the end of each month;
- (c) Emissions of phenol from the Floor Pouring, Cooling and Shakeout operations combined shall not exceed 1.48 tons per twelve (12) consecutive month period, with compliance determined at the end of each month;
- (d) Emissions of benzene from the Floor Pouring, Cooling and Shakeout operations combined shall not exceed 1.48 tons per twelve (12) consecutive month period, with compliance determined at the end of each month;
- (e) Emissions of any combination of organic HAPs from the Floor Pouring, Cooling and Shakeout operations combined shall not exceed 1.48 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

A summary of these limits is included in the following table:

Emission Unit	Pollutant	Emission Limit (tons/yr)
Floor Pouring, Cooling and Shakeout	Phenol	1.48
	Benzene	1.48
	Total Organic HAPs	1.48
High Speed Continuous Sand Mixer	Xylene	0.90
	Total Organic HAPs	0.90

Compliance with the emission limits in paragraphs (a), (c), and (d) above in conjunction with the other phenol, benzene, and xylene limits included in this permit limit source-wide phenol, benzene, and xylene emissions to less than 10 tons per year, each. Compliance with the limits in paragraphs (b) and (e) above in conjunction with the other combined HAP emission limits included in this permit limit source-wide emissions of any combination of HAPs to less than 25 tons per year.

D.4.6 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.4.7 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

- (a) During the period between 54 and 60 months after issuance of this permit, in order to demonstrate compliance with Conditions D.4.1 and D.4.2, the Permittee shall perform PM and PM-10 testing on each of the baghouses controlling the High Speed Continuous Sand Mixer hopper, the Knockout Station and the Wheelabrator shot blast machine, identified as 30-DC-6, 8-DC-2 and 36-DC-8, respectively, using 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 180 days after issuance of Significant Permit Modification No. 091-20949-00020, in order to demonstrate compliance with Condition D.4.5, the Permittee shall perform total organic HAP testing on the High Speed Continuous Sand Mixer 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. Testing shall be conducted in accordance with Section C- Performance Testing.

D.4.8 Particulate Matter (PM) and HAPs

- (a) In order to comply with Conditions D.4.1 and D.4.2, the baghouses for PM and PM10 control shall be in operation and control emissions from the High Speed Continuous Sand Mixer hopper, the Floor Knockout Station and the Wheelabrator shot blast machine at all times that the High Speed Continuous Sand Mixer hopper, the Floor Knockout Station and the Wheelabrator shot blast machine are in operation.
- (b) In order to comply with Condition D.4.4, the baghouses for PM, PM10 and metallic HAP control shall be in operation and control emissions from the Floor Knockout Station and the Wheelabrator shot blast machine at all times that the Floor Knockout Station and the Wheelabrator shot blast machine are in operation.
- (c) In the event that bag failure is observed in a multi-compartment dust collector, 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.4.9 HAP Emissions

- (a) Compliance with the metal HAP limits in condition D.4.4 shall be demonstrated using the following equations:
- (1) Lead Emissions from the Floor Pouring, Cooling, Shakeout, and Knockout operations (tons/yr) = $[EF_{FPPb} \text{ (lb/ton)} \times M_{FP} \text{ (tons per twelve (12) consecutive month period)}] + [EF_{FCPb} \text{ (lb/ton)} \times M_{FC} \text{ (tons per twelve (12) consecutive month period)}] + [EF_{FSPb} \text{ (lb/ton)} \times M_{FS} \text{ (tons per twelve (12) consecutive month period)}] + [EF_{FKPb} \text{ (lb/ton)} \times M_{FK} \text{ (tons per twelve (12) consecutive month period)}] \times (1 \text{ ton} / 2000 \text{ pounds})$

Where:

EF_{FPPb} = 0.01617 pound lead per ton of metal throughput (or an emission factor determined from the most recent compliance stack test)

M_{FP} = total metal throughput to the Floor Pouring operation (tons per twelve (12) consecutive month period)

EF_{FCPb} = 0.00539 pound lead per ton of metal throughput (or an emission factor determined from the most recent compliance stack test)

M_{FC} = total metal throughput to the Floor Cooling operation (tons per twelve (12) consecutive month period)
 EF_{FSPb} = 0.01232 pound lead per ton of metal throughput (or an emission factor determined from the most recent compliance stack test)
 M_{FS} = total metal throughput to the Floor Shakeout operation (tons per twelve (12) consecutive month period)
 EF_{FKPb} = 0.0256 pound lead per ton of metal throughput (or an emission factor determined from the most recent compliance stack test)
 EF_{FK} = total metal throughput to the Floor Knockout operation (tons per twelve (12) consecutive month period)

- (2) Manganese Emissions from the Floor Pouring, Cooling, Shakeout, and Knockout operations (tons/yr) = $[EF_{FPMn} \text{ (lb/ton)} \times M_{FP} \text{ (tons per twelve (12) consecutive month period)}] + [EF_{FCMn} \text{ (lb/ton)} \times M_{FC} \text{ (tons per twelve (12) consecutive month period)}] + [EF_{FSMn} \text{ (lb/ton)} \times M_{FS} \text{ (tons per twelve (12) consecutive month period)}] + [EF_{FKMn} \text{ (lb/ton)} \times M_{FK} \text{ (tons per twelve (12) consecutive month period)}] \times (1 \text{ ton} / 2000 \text{ pounds})$

Where:

EF_{FPMn} = 0.1302 pound manganese per ton of metal throughput (or an emission factor determined from the most recent compliance stack test)
 M_{FP} = total metal throughput to the Floor Pouring operation (tons per twelve (12) consecutive month period)
 EF_{FCMn} = 0.0434 pound manganese per ton of metal throughput (or an emission factor determined from the most recent compliance stack test)
 M_{FC} = total metal throughput to the Floor Cooling operation (tons per twelve (12) consecutive month period)
 EF_{FSMn} = 0.0992 pound manganese per ton of metal throughput (or an emission factor determined from the most recent compliance stack test)
 M_{FS} = total metal throughput to the Floor Shakeout operation (tons per twelve (12) consecutive month period)
 EF_{FKMn} = 0.0206 pound manganese per ton of metal throughput (or an emission factor determined from the most recent compliance stack test)
 EF_{FK} = total metal throughput to the Floor Knockout operation (tons per twelve (12) consecutive month period)

- (3) Total Metal HAP Emissions from the Floor Pouring, Cooling, Shakeout, and Knockout operations (tons/yr) = $[EF_{FPTM} \text{ (lb/ton)} \times M_{FP} \text{ (tons per twelve (12) consecutive month period)}] + [EF_{FCTM} \text{ (lb/ton)} \times M_{FC} \text{ (tons per twelve (12) consecutive month period)}] + [EF_{FSTM} \text{ (lb/ton)} \times M_{FS} \text{ (tons per twelve (12) consecutive month period)}] + [EF_{FKTM} \text{ (lb/ton)} \times M_{FK} \text{ (tons per twelve (12) consecutive month period)}] \times (1 \text{ ton} / 2000 \text{ pounds})$

Where:

EF_{FPTM} = 0.1591 pound combined metal HAP per ton of metal throughput (or an emission factor determined from the most recent compliance stack test)
 M_{FP} = total metal throughput to the Floor Pouring operation (tons per twelve (12) consecutive month period)
 EF_{FCTM} = 0.053 pound combined metal HAP per ton of metal throughput (or an emission factor determined from the most recent compliance stack test)
 M_{FC} = total metal throughput to the Floor Cooling operation (tons per twelve (12) consecutive month period)
 EF_{FSTM} = 0.12122 pound combined metal HAP per ton of metal throughput (or an emission factor determined from the most recent compliance stack test)
 M_{FS} = total metal throughput to the Floor Shakeout operation (tons per twelve (12) consecutive month period)

$EF_{FKTM} = 0.0252$ pound combined metal HAP per ton of metal throughput (or an emission factor determined from the most recent compliance stack test)
 $EF_{FK} =$ total metal throughput to the Floor Knockout operation (tons per twelve (12) consecutive month period)

- (4) Lead Emissions from the Wheelabrator shot blast machine (tons/yr) = EF_{WPb} (lb/ton) x M_W (tons per twelve (12) consecutive month period) x (1 ton / 2000 pounds)

Where:

$EF_{WPb} = 0.00137$ pound lead per ton of metal throughput (or an emission factor determined from the most recent compliance stack test)

$M_W =$ total metal throughput to the Wheelabrator shot blast machine (tons per twelve (12) consecutive month period)

- (5) Manganese Emissions from the Wheelabrator shot blast machine (tons/yr) = EF_{WMn} (lb/ton) x M_W (tons per twelve (12) consecutive month period) x (1 ton / 2000 pounds)

Where:

$EF_{WMn} = 0.0111$ pound manganese per ton of metal throughput (or an emission factor determined from the most recent compliance stack test)

$M_W =$ total metal throughput to the Wheelabrator shot blast machine (tons per twelve (12) consecutive month period)

- (6) Total Metal HAP Emissions from the Wheelabrator shot blast machine (tons/yr) = EF_{WTM} (lb/ton) x M_W (tons per twelve (12) consecutive month period) x (1 ton / 2000 pounds)

Where:

$EF_{WTM} = 0.0135$ pound combined metal HAP per ton of metal throughput (or an emission factor determined from the most recent compliance stack test)

$M_W =$ total metal throughput to the Wheelabrator shot blast machine (tons per twelve (12) consecutive month period)

- (b) Compliance with the organic HAP limits in condition D.4.5 shall be demonstrated using the following equations:

- (1) Phenol Emissions from the Floor Pouring, Cooling, Shakeout, and Knockout operations (tons/yr) = EF_{FPh} (lb/lb) x R_{NB} (pounds per twelve (12) consecutive month period) x (1 ton / 2000 pounds)

Where:

$EF_{FPh} = 0.0039$ pound phenol per pound of No Bake resin used (or an emission factor determined from the most recent compliance stack test)

$R_{NB} =$ total resin usage in the No Bake core making operation and High Speed Continuous Sand Mixer (pounds per twelve (12) consecutive month period)

- (2) Benzene Emissions from the Floor Pouring, Cooling, Shakeout, and Knockout operations (tons/yr) = EF_{FB} (lb/lb) x R_{NB} (pounds per twelve (12) consecutive month period) x (1 ton / 2000 pounds)

Where:

$EF_{FB} = 0.00535$ pound benzene per pound of No Bake resin used (or an emission factor determined from the most recent compliance stack test)

R_{NB} = total resin usage in the No Bake core making operation and High Speed Continuous Sand Mixer (pounds per twelve (12) consecutive month period)

- (3) Total Organic HAP Emissions from the Floor Pouring, Cooling, Shakeout, and Knockout operations (tons/yr) = EF_{FTO} (lb/lb) x R_{NB} (pounds per twelve (12) consecutive month period) x (1 ton / 2000 pounds)

Where:

EF_{FTO} = 0.01236 pound combined organic HAP per pound of No Bake resin used (or an emission factor determined from the most recent compliance stack test)

R_{NB} = total resin usage in the No Bake core making operation and High Speed Continuous Sand Mixer (pounds per twelve (12) consecutive month period)

- (4) Xylene Emissions from the High Speed Continuous Sand Mixer (tons/yr) = $[EF_{MR1X}$ (lb/lb) x R_{MNB1} (pounds per twelve (12) consecutive month period)] + $[EF_{MCX}$ (lb/lb) x C_{MNB} (pounds per twelve (12) consecutive month period)] x (1 ton / 2000 pounds)

Where:

EF_{MR1X} = 0.001 pound xylene per pound of No Bake Part I resin used (or an emission factor determined from the most recent compliance stack test)

R_{MNB1} = total No Bake Part I resin usage in the High Speed Continuous Sand Mixer (pounds per twelve (12) consecutive month period)

EF_{MCX} = 0.0489 pound xylene per pound of No Bake catalyst used (based on MSDS for catalyst)

C_{MNB} = total No Bake catalyst usage in the High Speed Continuous Sand Mixer (pounds per twelve (12) consecutive month period)

- (5) Total HAP Emissions from the High Speed Continuous Sand Mixer (tons/yr) = $[EF_{MR1TO}$ (lb/lb) x R_{MNB1} (pounds per twelve (12) consecutive month period)] + $[EF_{MR2TO}$ (lb/lb) x R_{MNB2} (pounds per twelve (12) consecutive month period)] + $[EF_{MCTO}$ (lb/lb) x C_{MNB} (pounds per twelve (12) consecutive month period)] x (1 ton / 2000 pounds)

Where:

EF_{MR1TO} = 0.0032 pound total organic HAPs per pound of No Bake Part I resin used (or an emission factor determined from the most recent compliance stack test)

R_{MNB1} = total No Bake Part I resin usage in the High Speed Continuous Sand Mixer (pounds per twelve (12) consecutive month period)

EF_{MR2TO} = 0.002 pound total organic HAPs per pound of No Bake Part II resin used (or an emission factor determined from the most recent compliance stack test)

R_{MNB2} = total No Bake Part II resin usage in the High Speed Continuous Sand Mixer (pounds per twelve (12) consecutive month period)

EF_{MCTO} = 0.0698 pound total organic HAPs per pound of No Bake catalyst used (based on MSDS for catalyst)

C_{MNB} = total No Bake catalyst usage in the High Speed Continuous Sand Mixer (pounds per twelve (12) consecutive month period)

- (c) Upon IDEM approval of any HAP compliance stack test results on the Floor Pouring, Cooling, Shakeout, or Knockout operations, the HAP emission factors obtained from the IDEM approved stack test results shall be used for the variables identified above as

EF_{FPPb} , EF_{FCPb} , EF_{FSPb} , EF_{FKPb} , EF_{FPMn} , EF_{FCMn} , EF_{FSMn} , EF_{FKMn} , EF_{FPTM} , EF_{FCTM} , EF_{FSTM} , EF_{FKTM} , EF_{FPh} , EF_{FB} , and EF_{FTO} , as applicable.

- (d) Upon IDEM approval of any HAP compliance stack test results on the Wheelabrator Shot Blast machine, the HAP emission factors obtained from the IDEM approved stack test results shall be used for the variables identified above as EF_{WPb} , EF_{WMn} , and EF_{WTM} as applicable.
- (e) Upon IDEM approval of total organic HAP compliance stack test results on the High Speed Continuous Sand Mixer, the xylene and total organic HAP emission factors in pound per pound obtained from the IDEM approved stack test results shall be used for the variables identified above as EF_{MR1X} , EF_{MR1TO} , and EF_{MR2TO} .

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

D.4.10 Visible Emissions Notations

- (a) Visible emission notations of the Floor pouring and cooling operations and each of the stack exhausts for the baghouses controlling the High Speed Continuous Sand Mixer hopper, the Knockout Station, and the Wheelabrator shot blast machine, shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.4.11 Parametric Monitoring

The Permittee shall record the pressure drop across each of the baghouses used in conjunction with the High Speed Continuous Sand Mixer hopper, the Knockout Station, and the Wheelabrator shot blast machine, at least once per day when the High Speed Continuous Sand Mixer hopper, the Knockout Station, and the Wheelabrator shot blast machine are in operation. When for any one reading, the pressure drop across any of the baghouses is outside the normal range of 1.0 and 7.0 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.

D.4.12 Broken or Failed Bag Detection

- (a) For a single compartment baghouse controlling emissions from a process operated

continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

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

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

D.4.13 Record Keeping Requirements

- (a) To document compliance with Condition D.4.1(d), the Permittee shall maintain records of the sand throughput to the High Speed Continuous Sand Mixer for each month.
- (b) To document compliance with Conditions D.4.1(e), D.4.1(g), D.4.3(a), and D.4.3(c), the Permittee shall maintain records of the resin and catalyst usage for the High Speed Continuous Sand Mixer for each month.
- (c) To document compliance with Condition D.4.1(f) and D.4.3(b), the Permittee shall maintain records of the VOC content of the binders used for the High Speed Continuous Sand Mixer each month.
- (d) To document compliance with Condition D.4.1(b), the Permittee shall maintain records of the metal throughput to the Wheelabrator shot blast machine for each month.
- (e) To document compliance with Condition D.4.10, the Permittee shall maintain records of visible emission notations of the Floor pouring and cooling operations and each of the stack exhausts for the baghouses controlling the High Speed Continuous Sand Mixer hopper, the Knockout Station, and the Wheelabrator shot blast machine once per day. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).
- (f) To document compliance with Condition D.4.11, the Permittee shall maintain records of the pressure drop once per day. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).
- (g) To document compliance with Condition D.4.4, the Permittee shall maintain records of the following:
 - (1) tons of metal throughput to each of the Floor Pouring, Floor Cooling, Floor Shakeout, and Floor Knockout operations for each month;
 - (2) tons of metal throughput to the Wheelabrator shot blast machine for each month;
 - (3) HAP stack test results for the Floor Pouring, Cooling, Shakeout, and Knockout operations or the Wheelabrator shot blast machine as applicable;
 - (4) Metallic HAP emission calculations performed monthly using the equations in condition D.4.9(a); and

- (5) Metallic HAP emissions in tons per year.
- (h) To document compliance with Condition D.4.5, the Permittee shall maintain records of the following:
 - (1) pounds of Part I and Part II resin used in the No Bake core making operation and the High Speed Continuous Sand Mixer for each month;
 - (2) Organic HAP stack test results for the High Speed Continuous Sand Mixer;
 - (3) Organic HAP emission calculations performed monthly using the equations in condition D.4.9(b); and
 - (4) Organic HAP emissions in tons per year.
- (i) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.4.14 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.4.1(b), D.4.1(d), D.4.1(e), D.4.1(g), D.4.3(a), D.4.3(c), D.4.4 and D.4.5, including supporting calculations and data used for determining compliance with the HAP emission limits in conditions D.4.4 and D.4.5, 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.5 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (j) one (1) Chill Iron shot blast machine (ID No. Chill Iron Shot Blast), installed in 1972, with a maximum throughput of 3,500 pounds of castings per hour, controlled by one (1) baghouse (ID No. 8-DC-2), exhausting inside the building;
- (k) one (1) paint spray booth (ID No. Spray Painting), installed in 1982, using a high volume low pressure (HVLP) coating application system, using a maximum of 9.8 pounds of coating per hour to coat metal base boards and a maximum of 10 gallons per year of paint thinner, with dry filters for particulate matter overspray control, exhausting through one (1) stack (ID No. 5-E-1);

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

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

D.5.1 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 Chill Iron shot blast machine shall not exceed 5.96 pounds per hour when operating at a process weight rate of 3,500 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:

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

D.5.2 HAP Minor Limit

- (a) Emissions of lead from the Chill Iron shot blast machine shall not exceed 0.20 ton per twelve (12) consecutive month period, with compliance determined at the end of each month;
- (b) Emissions of manganese from the Chill Iron shot blast machine shall not exceed 0.17 ton per twelve (12) consecutive month period, with compliance determined at the end of each month;
- (c) Emissions of any combination of metal HAPs from the Chill Iron shot blast machine shall not exceed 0.20 ton per twelve (12) consecutive month period, with compliance determined at the end of each month.

A summary of these limits is included in the following table:

Emission Unit	Pollutant	Emission Limit (ton/yr)
Chill Iron shot blast machine	Lead	0.20
	Manganese	0.17
	Total HAPs	0.20

Compliance with the emission limits in paragraphs (a) and (b) above in conjunction with the other lead and manganese limits included in this permit limit source-wide lead emissions and source-wide manganese emissions to less than 10 tons per year, each. Compliance with the limit in paragraph (c) above in conjunction with the other combined HAP limits included in this permit limit source-wide emissions of any combination of HAPs to less than 25 tons per year.

D.5.3 Particulate [326 IAC 6-3-2(d)]

Pursuant to 326 IAC 6-3-2(d), particulate from the paint spray booth shall be controlled by dry particulate filters, and the Permittee shall operate the control device in accordance with manufacturer's specifications.

D.5.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

Compliance Determination Requirements

D.5.5 Particulate Matter (PM) and HAPs

- (a) In order to comply with conditions D.5.1 and D.5.2, the baghouse for PM and metallic HAP control shall be in operation and control emissions from the Chill Iron shot blast machine at all times that the Chill Iron shot blast machine is in operation.
- (b) In the event that bag failure is observed in a multi-compartment dust collector, 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.5.6 HAP Emissions

Compliance with the HAP limits in condition D.5.2 shall be demonstrated using the following equations:

- (a) Lead Emissions from the Chill Iron shot blast machine (tons/yr) = EF_{ChPb} (lb/ton) x M_{Ch} (tons per twelve (12) consecutive month period) x (1 ton / 2000 pounds)

Where:

EF_{ChPb} = 0.0013 pound lead per ton of metal throughput (or an emission factor determined from the most recent compliance stack test)

M_{Ch} = total metal throughput to the Chill Iron shot blast machine (tons per twelve (12) consecutive month period)

- (b) Manganese Emissions from the Chill Iron shot blast machine (tons/yr) = EF_{ChMn} (lb/ton) x M_{Ch} (tons per twelve (12) consecutive month period) x (1 ton / 2000 pounds)

Where:

EF_{ChMn} = 0.0105 pound manganese per ton of metal throughput (or an emission factor determined from the most recent compliance stack test)

M_{Ch} = total metal throughput to the Chill Iron shot blast machine (tons per twelve (12) consecutive month period)

- (c) Total Metal HAP Emissions from the Chill Iron shot blast machine (tons/yr) = EF_{ChTM} (lb/ton) x M_{Ch} (tons per twelve (12) consecutive month period) x (1 ton / 2000 pounds)

Where:

EF_{ChTM} = 0.0128 pound combined metal HAP per ton of metal throughput (or an emission factor determined from the most recent compliance stack test)

M_{Ch} = total metal throughput to the Chill Iron shot blast machine (tons per twelve (12) consecutive month period)

- (d) Upon IDEM approval of any HAP compliance stack test results on the Chill Iron Shot Blast machine, the HAP emission factors obtained from the IDEM approved stack test results shall be used for the variables identified above as EF_{ChPb} , EF_{ChMn} , and EF_{ChTM} as applicable.

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

D.5.7 Visible Emissions Notations

- (a) Visible emission notations of the stack exhaust for the baghouse controlling the Chill Iron shot blast machine 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.5.8 Monitoring

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters in the paint spray booth. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth stack (5-E-1) while the booth is in operation. If a condition exists which should result in a response step, 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.
- (b) Monthly inspections shall be performed of the coating emissions from the stacks and the presence of overspray on the rooftops and the nearby ground. When there is a noticeable change in overspray emissions, or when evidence of overspray emissions is 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.5.9 Parametric Monitoring

The Permittee shall record the pressure drop across the baghouse used in conjunction with the Chill Iron shot blast machine, at least once per day when the Chill Iron shot blast machine is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 1.0 and 7.0 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.

D.5.10 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 emission unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

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

D.5.11 Record Keeping Requirements

- (a) To document compliance with Condition D.5.7, the Permittee shall maintain records of visible emission notations of the stack exhaust for the baghouse controlling the Chill Iron shot blast machine once per day. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).
- (b) To document compliance with Condition D.5.8, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections.
- (c) To document compliance with Condition D.5.9, the Permittee shall maintain records of the pressure drop once per day. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).
- (d) To document compliance with Condition D.5.2, the Permittee shall maintain records of the following:
 - (1) tons of metal throughput to the Chill Iron shot blast machine for each month;
 - (2) HAP stack test results for the Chill Iron shot blast machine as applicable;
 - (3) Metallic HAP emission calculations performed monthly using the equations in condition D.5.6; and

- (4) Metallic HAP emissions in tons per year.
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.5.12 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.5.2, including supporting calculations and data used for determining compliance with the HAP emission limits in condition D.5.2, 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.6 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (l) One (1) indoor scrap handling operation consisting of the following:
 - (1) one (1) metal scrap crusher, with a maximum scrap metal throughput of 15 tons per hour, with one (1) baghouse (ID No. 39-DC-5) for control of particulate matter emissions, exhausting through one (1) stack (ID No. 39-DC-5);
 - (2) one (1) rotary reclaimer, with maximum scrap metal and sand throughputs of 15 and 10 tons per hour, respectively, with one (1) baghouse (ID No. 39-DC-5) for control of particulate matter emissions, exhausting through one (1) stack (ID No. 39-DC-5);
 - (3) one (1) sand and metal conveyor, with maximum scrap metal and sand throughputs of 15 and 10 tons per hour, respectively, with one (1) baghouse (ID No. 39-DC-5) for control of particulate matter emissions, exhausting through one (1) stack (ID No. 39-DC-5); and
 - (4) one (1) enclosed conveyor system transporting spent sand to spent sand storage silo, with a maximum sand storage capacity of 100 tons, and a maximum sand throughput of 10 tons per hour, with one (1) baghouse (ID No. 39-DC-5) for control of particulate matter emissions, exhausting through one (1) stack (ID No. 39-DC-5).
- (m) one (1) pneumatically conveyed raw sand storage silo for the High Speed Continuous Sand Mixer, with a maximum sand storage capacity of 75 tons, and a maximum sand throughput of 10 tons per hour, with one (1) baghouse (ID No. 39-DC-5) for control of particulate matter emissions, exhausting through one (1) stack (ID No. 39-DC-5);

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

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

D.6.1 PSD Minor Limit [326 IAC 2-2]

- (a) The total PM and PM10 emissions from the indoor scrap handling operation and the raw sand storage silo that are controlled by the baghouse that exhausts through stack No. 39-DC-5 shall not exceed 0.10 and 0.06 pound per ton of metal and sand throughput, respectively.
- (b) The throughput of sand from the raw sand storage silo shall not exceed 42,574 tons of sand per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with the above PM and PM10 emission limitations and the sand throughput limitation will limit total PM and PM10 emissions from the indoor scrap handling operation, the raw sand storage silo, and the High Speed Continuous Sand Mixer (listed in section D.4) to less than 25 and 15 tons per year, respectively. Therefore, the requirements of 326 IAC 2-2 (PSD) do not apply.

D.6.2 Particulate [326 IAC 6-3-2]

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

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

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

The allowable emissions for each facility are as follows:

Emission Unit ID	Process Weight (tons/hr)	Allowable Particulate Emissions (lb/hr)
Crusher	15.00	25.16
Rotary Reclaimer	25.00	35.43
Spent Sand Storage Silo	10.00	19.18
Sand and Metal Conveyor	25.00	35.43
Raw Sand Storage Silo	10.00	19.18

- (b) For purposes of demonstrating compliance with the particulate emission limits for the indoor scrap handling operation and the raw sand storage silo, all of which are controlled by the baghouse that exhausts through stack No. 39-DC-5, the allowable particulate emission rate from stack No. 39-DC-5 shall be limited to 134.38 pounds per hour.

D.6.3 HAP Minor Limit

- (a) Emissions of lead from the scrap handling rotary reclaimer shall not exceed 0.32 ton per twelve (12) consecutive month period, with compliance determined at the end of each month;
- (b) Emissions of manganese from the scrap handling rotary reclaimer shall not exceed 0.27 ton per twelve (12) consecutive month period, with compliance determined at the end of each month;
- (c) Emissions of any combination of metal HAPs from the scrap handling rotary reclaimer shall not exceed 0.32 ton per twelve (12) consecutive month period, with compliance determined at the end of each month.

A summary of these limits is included in the following table:

Emission Unit	Pollutant	Emission Limit (ton/yr)
Scrap Handling Rotary Reclaimer	Lead	0.32
	Manganese	0.27
	Total HAPs	0.32

Compliance with the emission limits in paragraphs (a) and (b) above in conjunction with the other lead and manganese limits included in this permit limit source-wide lead emissions and source-wide manganese emissions to less than 10 tons per year, each. Compliance with the limit in paragraph (c) above in conjunction with the other combined HAP limits included in this permit limit source-wide emissions of any combination of HAPs to less than 25 tons per year.

D.6.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

Compliance Determination Requirements

D.6.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

In order to demonstrate compliance with Conditions D.6.1 and D.6.2, the Permittee shall perform PM and PM-10 testing on the baghouse that exhausts through stack No. 39-DC-5 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.

D.6.6 Particulate Matter (PM) and HAPs

- (a) In order to comply with Conditions D.6.1 and D.6.2, the baghouses for PM and PM10 control shall be in operation and control emissions from the indoor scrap handling operation and the raw sand storage silo for the High Speed Continuous Sand Mixer at all times that the indoor scrap handling operation and the raw sand storage silo for the High Speed Continuous Sand Mixer are in operation.
- (b) In order to comply with Condition D.6.3, the baghouse for PM, PM10 and metallic HAP control shall be in operation and control emissions from the indoor scrap handling operation at all times that the indoor scrap handling operation is in operation.
- (c) In the event that bag failure is observed in a multi-compartment dust collector, 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.6.7 HAP Emissions

Compliance with the HAP limits in condition D.6.3 shall be demonstrated using the following equations:

- (a) Lead Emissions from the scrap handling rotary reclaimer (tons/yr) = EF_{RRPb} (lb/ton) x M_{RR} (tons per twelve (12) consecutive month period) x (1 ton / 2000 pounds)

Where:

EF_{RRPb} = 0.00014 pound lead per ton of metal throughput (or an emission factor determined from the most recent compliance stack test)

M_{RR} = total metal throughput to the scrap handling rotary reclaimer (tons per twelve (12) consecutive month period)

- (b) Manganese Emissions from the scrap handling rotary reclaimer (tons/yr) = EF_{RRMn} (lb/ton) x M_{RR} (tons per twelve (12) consecutive month period) x (1 ton / 2000 pounds)

Where:

EF_{RRMn} = 0.0011 pound manganese per ton of metal throughput (or an emission factor determined from the most recent compliance stack test)

M_{RR} = total metal throughput to the scrap handling rotary reclaimer (tons per twelve (12) consecutive month period)

- (c) Total HAP Emissions from the scrap handling rotary reclaimer (tons/yr) = EF_{RRTM} (lb/ton) x M_{RR} (tons per twelve (12) consecutive month period) x (1 ton / 2000 pounds)

Where:

EF_{RRTM} = 0.0013 pound combined metal HAP per ton of metal throughput (or an emission factor determined from the most recent compliance stack test)

M_{RR} = total metal throughput to the scrap handling rotary reclaimer (tons per twelve (12) consecutive month period)

- (d) Upon IDEM approval of any HAP compliance stack test results on the scrap handling rotary reclaimer, the HAP emission factors obtained from the IDEM approved stack test results shall be used for the variables identified above as EF_{RRPb} , EF_{RRMn} , and EF_{RRTM} as applicable.

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

D.6.8 Visible Emissions Notations

- (a) Visible emission notations of the stack exhaust for the baghouse controlling the indoor scrap handling operation and the raw sand storage silo 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.6.9 Parametric Monitoring

The Permittee shall record the pressure drop across the baghouse controlling the indoor scrap handling system and the raw sand storage silo at least once per day when the indoor scrap handling system and the raw sand storage silo are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 1.0 and 7.0 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.

D.6.10 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 emission unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

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

D.6.11 Record Keeping Requirement

- (a) To document compliance with Condition D.6.1(b), the Permittee shall maintain records of the sand throughput to the raw sand storage silo for each month.
- (b) To document compliance with Condition D.6.8, the Permittee shall maintain records of visible emission notations of the stack exhaust for the baghouse controlling the indoor scrap handling operation and the raw sand storage silo once per day. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).
- (c) To document compliance with Condition D.6.9, the Permittee shall maintain records of the pressure drop once per day. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).
- (d) To document compliance with Condition D.6.3, the Permittee shall maintain records of the following:
- (1) tons of metal throughput to the scrap handling rotary reclaimer for each month;
 - (2) HAP stack test results for the scrap handling rotary reclaimer as applicable;
 - (3) Metallic HAP emission calculations performed monthly using the equations in condition D.6.7; and
 - (4) Metallic HAP emissions in tons per year.
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.6.12 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.6.1(b) and D.6.3, including supporting calculations and data used for determining compliance with the HAP emission limits in condition D.6.3, 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.7 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (n) two (2) 200 ton capacity core and mold sand silos (ID Nos. Silo #1 and Silo #2), both installed in 1950, each with a maximum sand throughput of 16.8 tons per hour, both controlled by one (1) baghouse (ID 37-1-DC-3), exhausting through one (1) stack (ID No. 37-1-DC-3);
- (o) one (1) Cold Box core making operation consisting of the following:
 - (1) one (1) Cold Box sand mixer, installed in 1975, with a maximum sand throughput of 5.8 tons per hour, controlled by one (1) baghouse (ID 36-1-DC-7), exhausting through one (1) stack (ID No. 36-1-DC-7);
 - (2) one (1) Cold Box core machine, installed in 1975, with a maximum throughput of 5.8 tons per hour of sand, with VOC and HAP emissions controlled by one (1) natural gas fired afterburner (ID No. Afterburner J), rated at 1.4 MMBtu per hour, exhausting through one (1) stack (ID No. 37-1-E-2); and
 - (3) one (1) 10 ton capacity Cold Box line sand hopper and elevator, installed in 1975, with a maximum sand throughput of 5.8 tons per hour, controlled by one (1) baghouse (ID 36-1-DC-7), which exhausts through one (1) stack (ID No. 36-1-DC-7);
- (p) one (1) No Bake core making operation consisting of the following:
 - (1) one (1) enclosed No Bake sand mixer, installed in 1979, consisting of the No Bake Large Core Mixer and the No Bake Small Core Mixer, with a maximum sand throughput of 6.0 tons per hour;
 - (2) one (1) No Bake core machine, installed in 1979, with a maximum throughput of 6.0 tons per hour of sand, exhausting inside the building; and
 - (3) one (1) 10 ton capacity No Bake line sand hopper, installed in 1979, with a maximum sand throughput of 6.0 tons per hour, controlled by one (1) baghouse (ID 36-1-DC-7), which exhausts through one (1) stack (ID No. 36-1-DC-7);
- (q) one (1) Warm Box core making operation consisting of the following:
 - (1) two (2) Warm Box mixers (ID Nos. Mixer 1 and Mixer 2), installed in 1971 and 1981, respectively, each with maximum throughputs of 3.5 and 1.5 tons of sand per hour, respectively, both controlled by one (1) baghouse (ID 36-1-DC-7), which exhausts through one (1) stack (ID No. 36-1-DC-7);
 - (2) three (3) Warm Box core machines (ID Warm Box Core Machines #1, #2, and #3), installed in 1971, 1976, and 1981, respectively, each with a maximum throughput of 1.73 tons per hour of sand, all exhausting inside the building; and
 - (3) one (1) 10 ton capacity Warm Box line sand hopper, installed in 1971, with a maximum sand throughput of 5.0 tons of sand per hour, controlled by one (1) baghouse (ID 36-1-DC-7), which exhausts through one (1) stack (ID No. 36-1-DC-7);
- (r) one (1) enclosed 10 ton capacity core and mold sand hopper, elevator, and conveyor, installed in 1975, with a maximum sand throughput of 16.8 tons per hour; and
- (s) one (1) dip tank (ID No. Dip Tank Painting), installed in 1970, using a maximum of 5.8 pounds of coating per hour to coat metal parts, exhausting through one (1) stack (ID No. 3-E-1).

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

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

D.7.1 PSD Minor Limit [326 IAC 2-2]

- (a) Total PM emissions from the baghouse (36-1-DC-7) controlling PM emissions from the No Bake line sand hopper installed in 1979, shall not exceed 0.28 pounds per hour. The baghouse (36-1-DC-7) shall be in operation at all times that the No Bake line sand hopper is in operation and shall maintain a minimum capture efficiency of 75% in order to comply with this limit. This PM limit and associated capture efficiency requirement in conjunction with the fugitive PM emissions from the No Bake line sand hopper will limit emissions from the No Bake line sand hopper to less than 25 tons per year.

- (b) The resin usage for the No bake core machine shall not exceed 255,867 pounds of resin per 12 consecutive month period, with compliance determined at the end of each month. Catalyst usage for the No Bake core machine shall not exceed 63,967 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 No Bake core machine shall not exceed 0.05 pound per pound of resin.

Compliance with the PM emission limit, the resin and catalyst usage limits and the VOC emission limit for the No Bake resins will limit total VOC and PM emissions from all emission units installed in 1979 to less than 40 and 25 tons per year, respectively, so that the requirements of 326 IAC 2-2 (PSD) do not apply.

D.7.2 Particulate [326 IAC 6-3-2]

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

Interpolation of the data for the process weight rate up to 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 allowable emissions for each facility are as follows:

Emission Unit ID	Process Weight (tons/hr)	Allowable Particulate Emissions (lb/hr)
Cold Box Line Mixer and Sand Handling	5.80	13.31
No Bake Line Sand Handling	6.00	13.62
Warm Box Line Sand Handling	5.00	12.05

- (b) For purposes of demonstrating compliance with the particulate emission limits pursuant to 326 IAC 6-3-2 for the Isocure Sand Mixer and sand handling, the Pepset line sand handling, the Warm Box line sand handling, and the B-Line Shakeout and the B-Line Muller & Sand Handling (including the B-Line Holding Silo) listed in section D.3, all of which are controlled by the baghouse identified as 36-1-DC-7, the allowable particulate emission rate from the baghouse identified as 36-1-DC-7 shall be limited to 142.77 pounds per hour.

D.7.3 HAP Minor Limit

- (a) The total emissions of xylene from the No Bake core making operation shall not exceed 0.80 tons per twelve (12) consecutive month period, with compliance determined at the end of each month;
- (b) The total emissions of any combination of HAPs from the No Bake core making operation shall not exceed 0.80 ton per twelve (12) consecutive month period, with compliance determined at the end of each month;

- (c) The total emissions of ethylene glycol from the Warm Box core making operation shall not exceed 5.22 tons per twelve (12) consecutive month period, with compliance determined at the end of each month;
- (d) The total emissions of phenol from the Warm Box core making operation shall not exceed 4.03 tons per twelve (12) consecutive month period, with compliance determined at the end of each month;
- (e) The total emissions of any combination of HAPs from the Warm Box core making operation shall not exceed 5.22 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

A summary of these limits is included in the following table:

Emission Unit	Pollutant	Emission Limit (tons/yr)
No Bake Core Making	Xylene	0.80
	Total HAPs	0.80
Warm Box Core Making	Ethylene glycol	5.22
	Phenol	4.03
	Total HAPs	5.22

Compliance with the emission limits in paragraphs (a) and (d) above in conjunction with other xylene and phenol limits included in this permit limit source-wide xylene and phenol emissions to less than 10 tons per year, each. Compliance with the limit in paragraph (c) above limits source-wide ethylene glycol emissions to less than 10 tons per year. Compliance with the limits in paragraphs (b) and (e) above in conjunction with other combined HAP limits included in this permit limit source-wide emissions of any combination of HAPs to less than 25 tons per year.

D.7.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

Compliance Determination Requirements

D.7.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

- (a) In order to demonstrate compliance with Conditions D.7.1 and D.7.2, the Permittee shall perform PM testing on the baghouse identified as 36-1-DC-7, 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. Testing shall be conducted in accordance with Section C- Performance Testing.
- (b) Within 180 days after issuance of Significant Permit Modification No. 091-20949-00020, in order to demonstrate compliance with Condition D.7.3, the Permittee shall perform total organic HAP testing on the No Bake core making operation 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. Testing shall be conducted in accordance with Section C - Performance Testing.

D.7.6 Particulate Matter (PM)

- (a) In order to comply with Conditions D.7.1 and D.7.2, the baghouse for PM control shall be in operation and control emissions from the Cold Box Sand Mixer, the Cold Box line sand hopper, the No Bake line sand hopper, the Warm Box line sand hopper, and the Warm Box Sand Mixers, at all times that the Cold Box Sand Mixer, the Cold Box line sand hopper, the No Bake line sand hopper, the Warm Box line sand hopper, and the Warm Box Sand Mixers are in operation.
- (b) In the event that bag failure is observed in a multi-compartment dust collector, 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.7.7 HAP Emissions

Compliance with the HAP limits in condition D.7.3 shall be demonstrated using the following equations:

- (a) Xylene Emissions from the No Bake core making operation (tons/yr) = $[EF_{NBR1X} \text{ (lb/lb)} \times R_{CNB1} \text{ (pounds per twelve (12) consecutive month period)}] + [EF_{NBCX} \text{ (lb/lb)} \times C_{CNB} \text{ (pounds per twelve (12) consecutive month period)}] \times (1 \text{ ton} / 2000 \text{ pounds})$

Where:

EF_{NBR1X} = 0.001 pound xylene per pound of No Bake Part I resin used (or an emission factor determined from the most recent compliance stack test)

R_{CNB1} = total No Bake Part I resin usage in the No Bake core making operation (pounds per twelve (12) consecutive month period)

EF_{NBCX} = 0.0489 pound xylene per pound of No Bake catalyst used (based on MSDS for catalyst)

C_{CNB} = total No Bake catalyst usage in the No Bake core making operation (pounds per twelve (12) consecutive month period)

- (b) Total Organic HAP Emissions from the No Bake core making operation (tons/yr) = $[EF_{NBR1TO} \text{ (lb/lb)} \times R_{CNB1} \text{ (pounds per twelve (12) consecutive month period)}] + [EF_{NBR2TO} \text{ (lb/lb)} \times R_{CNB2} \text{ (pounds per twelve (12) consecutive month period)}] + [EF_{NBCTO} \text{ (lb/lb)} \times C_{CNB} \text{ (pounds per twelve (12) consecutive month period)}] \times (1 \text{ ton} / 2000 \text{ pounds})$

Where:

EF_{NBR1TO} = 0.0032 pound total organic HAPs per pound of No Bake Part I resin used (or an emission factor determined from the most recent compliance stack test)

R_{CNB1} = total No Bake Part I resin usage in the No Bake core making operation (pounds per twelve (12) consecutive month period)

EF_{NBR2TO} = 0.002 pound total organic HAPs per pound of No Bake Part II resin used (or an emission factor determined from the most recent compliance stack test)

R_{CNB2} = total No Bake Part II resin usage in the No Bake core making operation (pounds per twelve (12) consecutive month period)

EF_{NBCTO} = 0.0698 pound total organic HAPs per pound of No Bake catalyst used (based on MSDS for catalyst)

C_{CNB} = total No Bake catalyst usage in the No Bake core making operation (pounds per twelve (12) consecutive month period)

- (c) Ethylene Glycol Emissions from the Warm Box core making operation (tons/yr) = $EF_{WBEG} \text{ (lb/lb)} \times C_{WB} \text{ (pounds per twelve (12) consecutive month period)} \times (1 \text{ ton} / 2000 \text{ pounds})$

Where:

$EF_{WBEG} = 0.08$ pound ethylene glycol per pound of Warm Box catalyst used (based on MSDS for catalyst)

$C_{WB} =$ total Warm Box catalyst usage in the Warm Box core making operation (pounds per twelve (12) consecutive month period)

- (d) Phenol Emissions from the Warm Box core making operation (tons/yr) = E_{WBPh} (lb/lb) x C_{WB} (pounds per twelve (12) consecutive month period) x (1 ton / 2000 pounds)

Where:

$E_{WBPh} = 0.06$ pound phenol per pound of Warm Box catalyst used (based on MSDS for catalyst)

$C_{WB} =$ total Warm Box catalyst usage in the Warm Box core making operation (pounds per twelve (12) consecutive month period)

- (e) Total HAP Emissions from the Warm Box core making operation (tons/yr) = [EF_{WBRTO} (lb/lb) x R_{WB} (pounds per twelve (12) consecutive month period)] + [EF_{WBCTO} (lb/lb) x C_{WB} (pounds per twelve (12) consecutive month period)] x (1 ton / 2000 pounds)

Where:

$EF_{WBRTO} = 0.00075$ pound total organic HAPs per pound of Warm Box resin used

$R_{WB} =$ total Warm Box resin usage in the Warm Box core making operation (pounds per twelve (12) consecutive month period)

$EF_{WBCTO} = 0.14$ pound total organic HAPs per pound of Warm Box catalyst used (based on MSDS for catalyst)

$C_{WB} =$ total Warm Box catalyst usage in the Warm Box core making operation (pounds per twelve (12) consecutive month period)

- (f) Upon IDEM approval of total organic HAP compliance stack test results on the No Bake core making operation, the xylene and total organic HAP emission factors in pound per pound obtained from the IDEM approved stack test results shall be used for the variables identified above as EF_{NBR1X} , EF_{NBR1TO} , and EF_{NBR2TO} .

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

D.7.8 Visible Emissions Notations

- (a) Visible emission notations of the stack exhaust for the baghouse controlling the Cold Box Line Sand Mixer, the Cold Box line sand hopper, the No Bake line sand hopper, the Warm Box Line Mixers and hopper, and the core and mold sand hopper, identified as 36-1-DC-7, 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.7.9 Parametric Monitoring

The Permittee shall record the pressure drop across the baghouse controlling the Cold Box Line Sand Mixer, the Cold Box line sand hopper, the No Bake line sand hopper, the Warm Box Line Mixers and hopper, and the core and mold sand hopper at least once per day when the Cold Box Line Sand Mixer, the Cold Box line sand hopper, the No Bake line sand hopper, the Warm Box Line Mixers and hopper, and the core and mold sand hopper are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 2.0 and 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 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.

D.7.10 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 emission unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

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

D.7.11 Record Keeping Requirement

- (a) To document compliance with Condition D.7.1(a), the Permittee shall maintain records of the sand throughput to the No Bake Sand Mixer, the No Bake core machine, and the No Bake line sand hopper for each month.
- (b) To document compliance with Conditions D.7.1(c), the Permittee shall maintain records of the resin and catalyst usage for the No Bake core machine for each month.
- (c) To document compliance with Condition D.7.3, the Permittee shall maintain records of the following:
 - (1) pounds of combined catalyst and combined resin usage for the Warm Box core machines for each month;
 - (2) Organic HAP stack test results for the No Bake core making operation;

- (3) Organic HAP emission calculations performed monthly using the equations in condition D.7.7; and
- (4) Organic HAP emissions in tons per year.

- (d) To document compliance with Condition D.7.8, the Permittee shall maintain records of visible emission notations of the stack exhaust for the baghouse controlling the Cold Box Line Sand Mixer, the Cold Box line sand hopper, the No Bake line sand hopper, the Warm Box Line Mixers and hopper, and the core and mold sand hopper once per day. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

- (e) To document compliance with Condition D.7.9, the Permittee shall maintain records of the pressure drop once per day. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).

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

D.7.12 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.7.1(a), D.7.1(c) and D.7.3, including supporting calculations and data used for determining compliance with the HAP emission limits in condition D.7.3, 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).

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

PART 70 OPERATING PERMIT CERTIFICATION

Source Name: Weil-McLain
Source Address: 500 Blaine Street, Michigan City, Indiana 46360
Mailing Address: 500 Blaine Street, Michigan City, Indiana 46360-2388
Part 70 Permit No.: T091-6295-00020

**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
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
Phone: 317-233-0178
Fax: 317-233-6865**

**PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT**

Source Name: Weil-McLain
Source Address: 500 Blaine Street, Michigan City, Indiana 46360
Mailing Address: 500 Blaine Street, Michigan City, Indiana 46360-2388
Part 70 Permit No.: T091-6295-00020

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)
X The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and
X The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16.

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

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

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

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: Weil-McLain
 Source Address: 500 Blaine Street, Michigan City, Indiana 46360
 Mailing Address: 500 Blaine Street, Michigan City, Indiana 46360-2388
 Part 70 Permit No.: T091-6295-00020
 Facility: Four (4) electric induction furnaces, the electric holding furnace, and the charge handling system
 Parameter: PM and PM10 emissions and Lead, Manganese and combined HAP emissions
 Limit: The throughput of metal to each of the following facilities shall not exceed 50,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month: (1) all four (4) electric induction furnaces; (2) the electric holding furnace; and (3) the charge handling system

YEAR:

Month	Metal Throughput This Month (tons)			Metal Throughput Previous 11 Months (tons)			12 Month Total Metal Throughput (tons)		
	Electric Induction Furnaces	Electric Holding Furnace	Charge Handling	Electric Induction Furnaces	Electric Holding Furnace	Charge Handling	Electric Induction Furnaces	Electric Holding Furnace	Charge Handling

- 9 No deviation occurred in this quarter.
- 9 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: Weil-McLain
Source Address: 500 Blaine Street, Michigan City, Indiana 46360
Mailing Address: 500 Blaine Street, Michigan City, Indiana 46360-2388
Part 70 Permit No.: T091-6295-00020
Facility: A-Line Muller
Parameter: PM emissions
Limit: The throughput of sand to the A-Line Muller, Sand Cooler and A-Line Holding Silo shall not exceed 464,200 tons per twelve (12) consecutive month period.

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)

- 9 No deviation occurred in this quarter.
- 9 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: Weil-McLain
 Source Address: 500 Blaine Street, Michigan City, Indiana 46360
 Mailing Address: 500 Blaine Street, Michigan City, Indiana 46360-2388
 Part 70 Permit No.: T091-6295-00020
 Facility: B-Line Pouring, B-Line Cooling, and B-Line Shakeout operations
 Parameter: PM emissions
 Limit: The throughput of metal to each of the B-Line Pouring, B-Line Cooling, and B-Line Shakeout operations shall not exceed 31,500 tons per twelve (12) consecutive month period.

YEAR:

Month	Metal Throughput This Month (tons)			Metal Throughput Previous 11 Months (tons)			12 Month Total Metal Throughput (tons)		
	B-Line Pouring	B-Line Cooling	B-Line Shakeout	B-Line Pouring	B-Line Cooling	B-Line Shakeout	B-Line Pouring	B-Line Cooling	B-Line Shakeout

9 No deviation occurred in this quarter.

9 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: Weil-McLain
Source Address: 500 Blaine Street, Michigan City, Indiana 46360
Mailing Address: 500 Blaine Street, Michigan City, Indiana 46360-2388
Part 70 Permit No.: T091-6295-00020
Facility: B-Line Muller
Parameter: PM emissions
Limit: The throughput of sand to the B-Line Muller and B-Line Holding Silo shall not exceed 130,000 tons per twelve (12) consecutive month period.

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)

- 9 No deviation occurred in this quarter.
- 9 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: Weil-McLain
 Source Address: 500 Blaine Street, Michigan City, Indiana 46360
 Mailing Address: 500 Blaine Street, Michigan City, Indiana 46360-2388
 Part 70 Permit No.: T091-6295-00020
 Facility: High Speed Continuous Sand Mixer and Hopper
 Parameter: PM, PM10, and VOC emissions
 Limit: The throughput of sand to the High Speed Continuous Sand Mixer (ID Mixer) shall be limited to a maximum of 42,574 tons of sand per twelve (12) consecutive month period.

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)

- 9 No deviation occurred in this quarter.
- 9 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: Weil-McLain
 Source Address: 500 Blaine Street, Michigan City, Indiana 46360
 Mailing Address: 500 Blaine Street, Michigan City, Indiana 46360-2388
 Part 70 Permit No.: T091-6295-00020
 Facility: High Speed Continuous Sand Mixer
 Parameter: VOC emissions
 Limit: (a) The resin usage for the High Speed Continuous Sand Mixer (ID Mixer) shall not exceed 471,789 pounds of resin per 12 consecutive month period.
 (b) Catalyst usage for the High Speed Continuous Sand Mixer shall not exceed 26,211 pounds of VOC catalyst per 12 consecutive month period, with compliance determined at the end of each month.

YEAR:

Month	Column 1		Column 2		Column 1 + Column 2	
	Resin Usage This Month (pounds)	Catalyst Usage This Month (pounds)	Resin Usage Previous 11 Months (pounds)	Catalyst Usage Previous 11 Months (pounds)	12 Month Total Resin Usage (pounds)	12 Month Total Catalyst Usage (pounds)

9 No deviation occurred in this quarter.

9 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: Weil-McLain
Source Address: 500 Blaine Street, Michigan City, Indiana 46360
Mailing Address: 500 Blaine Street, Michigan City, Indiana 46360-2388
Part 70 Permit No.: T091-6295-00020
Facility: Wheelabrator shot blast machine
Parameter: VOC emissions
Limit: The throughput of metal to the Wheelabrator shot blast machine shall not exceed 71,200 tons per twelve (12) consecutive month period.

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)

- 9 No deviation occurred in this quarter.
- 9 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: Weil-McLain
Source Address: 500 Blaine Street, Michigan City, Indiana 46360
Mailing Address: 500 Blaine Street, Michigan City, Indiana 46360-2388
Part 70 Permit No.: T091-6295-00020
Facility: Raw sand storage silo for the High Speed Continuous Sand Mixer
Parameter: PM and PM10 emissions
Limit: The throughput of sand from the raw sand storage silo shall not exceed 42,574 tons of sand per twelve (12) consecutive month period.

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)

- 9 No deviation occurred in this quarter.
- 9 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: Weil-McLain
 Source Address: 500 Blaine Street, Michigan City, Indiana 46360
 Mailing Address: 500 Blaine Street, Michigan City, Indiana 46360-2388
 Part 70 Permit No.: T091-6295-00020
 Facility: No Bake core machine
 Parameter: VOC emissions
 Limit: The resin usage for the No Bake core machine shall not exceed 255,867 pounds of resin per 12 consecutive month period. Catalyst usage for the No Bake core machine shall not exceed 63,967 pounds of VOC catalyst per 12 consecutive month period.

YEAR:

Month	Column 1		Column 2		Column 1 + Column 2	
	Resin Usage This Month (pounds)	Catalyst Usage This Month (pounds)	Resin Usage Previous 11 Months (pounds)	Catalyst Usage Previous 11 Months (pounds)	12 Month Total Resin Usage (pounds)	12 Month Total Catalyst Usage (pounds)

9 No deviation occurred in this quarter.

9 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: Weil-McLain
 Source Address: 500 Blaine Street, Michigan City, Indiana 46360
 Mailing Address: 500 Blaine Street, Michigan City, Indiana 46360-2388
 Part 70 Permit No.: T091-6295-00020
 Facility: Four (4) electric induction furnaces
 Parameter: Lead, manganese and total HAP emissions
 Limit: (a) Emissions of lead from the four (4) electric induction furnaces (ID Nos. 1, 2, 3, and 4) shall not exceed 2.32 tons per twelve (12) consecutive month period, with compliance determined at the end of each month;
 (b) Emissions of manganese from the four (4) electric induction furnaces (ID Nos. 1, 2, 3, and 4) shall not exceed 0.66 ton per twelve (12) consecutive month period, with compliance determined at the end of each month;
 (c) Emission of any combination of HAPs from the four (4) electric induction furnaces (ID Nos. 1, 2, 3, and 4) shall not exceed 2.43 tons per twelve (12) consecutive month period, with compliance determined at the end of each month;

Compliance with the above limits shall be determined using the equations in condition D.1.7(a), (c), and (e). Please attach supporting calculations and data used for determining HAP emissions reported.

YEAR:

Month	Column 1a	Column 1b	Column 1c	Column 2a	Column 2b	Column 2c
	Lead Emissions This Month (tons)	Manganese Emissions This Month (tons)	Total HAP Emissions This Month (tons)	Lead Emissions Previous 11 Months (tons)	Manganese Emissions Previous 11 Months (tons)	Total HAP Emissions Previous 11 Months (tons)

This Part 70 Operating Permit Quarterly Report consists of 2 pages.

This Part 70 Operating Permit Quarterly Report consists of 2 pages.

Month	Column 1a + Column 2a	Column 1b + Column 2b	Column 1c + Column 2c
	12 Month Total Lead Emissions (tons)	12 Month Total Mn Emissions (tons)	12 Month Total HAP Emissions (tons)

- 9 No deviation occurred in this quarter.
- 9 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: Weil-McLain
 Source Address: 500 Blaine Street, Michigan City, Indiana 46360
 Mailing Address: 500 Blaine Street, Michigan City, Indiana 46360-2388
 Part 70 Permit No.: T091-6295-00020
 Facility: Charge handling
 Parameter: Lead, manganese and total HAP emissions
 Limit: (a) Emissions of lead from the charge handling system shall not exceed 0.10 ton per twelve (12) consecutive month period, with compliance determined at the end of each month;
 (b) Emissions of manganese from the charge handling system shall not exceed 0.47 ton per twelve (12) consecutive month period, with compliance determined at the end of each month;
 (c) Emissions of any combination of HAPs from the charge handling system shall not exceed 0.57 ton per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with the above limits shall be determined using the equations in condition D.1.7(b), (d), and (f). Please attach supporting calculations and data used for determining HAP emissions reported.

YEAR:

Month	Column 1a	Column 1b	Column 1c	Column 2a	Column 2b	Column 2c
	Lead Emissions This Month (tons)	Manganese Emissions This Month (tons)	Total HAP Emissions This Month (tons)	Lead Emissions Previous 11 Months (tons)	Manganese Emissions Previous 11 Months (tons)	Total HAP Emissions Previous 11 Months (tons)

This Part 70 Operating Permit Quarterly Report consists of 2 pages.

This Part 70 Operating Permit Quarterly Report consists of 2 pages.

Month	Column 1a + Column 2a	Column 1b + Column 2b	Column 1c + Column 2c
	12 Month Total Lead Emissions (tons)	12 Month Total Mn Emissions (tons)	12 Month Total HAP Emissions (tons)

- 9 No deviation occurred in this quarter.
- 9 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: Weil-McLain
 Source Address: 500 Blaine Street, Michigan City, Indiana 46360
 Mailing Address: 500 Blaine Street, Michigan City, Indiana 46360-2388
 Part 70 Permit No.: T091-6295-00020
 Facility: A-Line Pouring, Cooling, and Shakeout operations
 Parameter: Lead, manganese and total metal HAP emissions
 Limit: (a) Total emissions of lead from the A-Line Pouring, Cooling, and Shakeout operations shall not exceed 1.10 tons per twelve (12) consecutive month period, with compliance determined at the end of each month;
 (b) Total emissions of manganese from the A-Line Pouring, Cooling, and Shakeout operations shall not exceed 3.04 tons per twelve (12) consecutive month period, with compliance determined at the end of each month;
 (c) Total emissions of any combination of metal HAPs from the A-Line Pouring, Cooling, and Shakeout operations shall not exceed 3.71 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with the above limits shall be determined using the equations in condition D.2.8(a). Please attach supporting calculations and data used for determining HAP emissions reported.

YEAR:

Month	Column 1a	Column 1b	Column 1c	Column 2a	Column 2b	Column 2c
	Lead Emissions This Month (tons)	Manganese Emissions This Month (tons)	Total Metal HAP Emissions This Month (tons)	Lead Emissions Previous 11 Months (tons)	Manganese Emissions Previous 11 Months (tons)	Total Metal HAP Emissions Previous 11 Months (tons)

This Part 70 Operating Permit Quarterly Report consists of 2 pages.

This Part 70 Operating Permit Quarterly Report consists of 2 pages.

Month	Column 1a + Column 2a	Column 1b + Column 2b	Column 1c + Column 2c
	12 Month Total Lead Emissions (tons)	12 Month Total Mn Emissions (tons)	12 Month Total Metal HAP Emissions (tons)

- 9 No deviation occurred in this quarter.
- 9 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: Weil-McLain
 Source Address: 500 Blaine Street, Michigan City, Indiana 46360
 Mailing Address: 500 Blaine Street, Michigan City, Indiana 46360-2388
 Part 70 Permit No.: T091-6295-00020
 Facility: A-Line and B-Line Pouring, Cooling, and Shakeout operations
 Parameter: Phenol, benzene, and total organic HAP emissions
 Limit: (a) Emissions of phenol from the A-Line Pouring, Cooling and Shakeout operations (listed in section D.2) and the B-Line Pouring, Cooling and Shakeout operations (listed in section D.3) combined shall not exceed 1.85 tons per twelve (12) consecutive month period, with compliance determined at the end of each month;
 (b) Emissions of benzene from the A-Line Pouring, Cooling and Shakeout operations (listed in section D.2) and the B-Line Pouring, Cooling and Shakeout operations (listed in section D.3) combined shall not exceed 2.41 tons per twelve (12) consecutive month period, with compliance determined at the end of each month;
 (c) Emissions of any combination of organic HAPs from the A-Line Pouring, Cooling and Shakeout operations (listed in section D.2) and the B-Line Pouring, Cooling and Shakeout operations (listed in section D.3) combined shall not exceed 2.41 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with the above limits shall be determined using the equations in condition D.2.8(b) and D.3.8(b). Please attach supporting calculations and data used for determining HAP emissions reported.

YEAR:

Month	Column 1a	Column 1b	Column 1c	Column 2a	Column 2b	Column 2c
	Phenol Emissions This Month (tons)	Benzene Emissions This Month (tons)	Total Organic HAP Emissions This Month (tons)	Phenol Emissions Previous 11 Months (tons)	Benzene Emissions Previous 11 Months (tons)	Total Organic HAP Emissions Previous 11 Months (tons)

This Part 70 Operating Permit Quarterly Report consists of 2 pages.

This Part 70 Operating Permit Quarterly Report consists of 2 pages.

Month	Column 1a + Column 2a	Column 1b + Column 2b	Column 1c + Column 2c
	12 Month Total Phenol Emissions (tons)	12 Month Total Benzene Emissions (tons)	12 Month Total Organic HAP Emissions (tons)

- 9 No deviation occurred in this quarter.
- 9 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: Weil-McLain
 Source Address: 500 Blaine Street, Michigan City, Indiana 46360
 Mailing Address: 500 Blaine Street, Michigan City, Indiana 46360-2388
 Part 70 Permit No.: T091-6295-00020
 Facility: B-Line Pouring, Cooling, and Shakeout operations
 Parameter: Lead, manganese and total metal HAP emissions
 Limit: (a) Total emissions of lead from the B-Line Pouring, Cooling, and Shakeout operations shall not exceed 0.65 ton per twelve (12) consecutive month period, with compliance determined at the end of each month;
 (b) Total emissions of manganese from the B-Line Pouring, Cooling, and Shakeout operations shall not exceed 1.36 ton per twelve (12) consecutive month period, with compliance determined at the end of each month;
 (c) Total emissions of any combination of metal HAPs from the B-Line Pouring, Cooling, and Shakeout operations shall not exceed 1.67 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with the above limits shall be determined using the equations in condition D.3.8(a). Please attach supporting calculations and data used for determining HAP emissions reported.

YEAR:

Month	Column 1a	Column 1b	Column 1c	Column 2a	Column 2b	Column 2c
	Lead Emissions This Month (tons)	Manganese Emissions This Month (tons)	Total Metal HAP Emissions This Month (tons)	Lead Emissions Previous 11 Months (tons)	Manganese Emissions Previous 11 Months (tons)	Total Metal HAP Emissions Previous 11 Months (tons)

This Part 70 Operating Permit Quarterly Report consists of 2 pages.

This Part 70 Operating Permit Quarterly Report consists of 2 pages.

Month	Column 1a + Column 2a	Column 1b + Column 2b	Column 1c + Column 2c
	12 Month Total Lead Emissions (tons)	12 Month Total Mn Emissions (tons)	12 Month Total Metal HAP Emissions (tons)

- 9 No deviation occurred in this quarter.
- 9 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: Weil-McLain
 Source Address: 500 Blaine Street, Michigan City, Indiana 46360
 Mailing Address: 500 Blaine Street, Michigan City, Indiana 46360-2388
 Part 70 Permit No.: T091-6295-00020
 Facility: Floor Pouring, Cooling, Shakeout, and Knockout operations
 Parameter: Lead, manganese and total metal HAP emissions
 Limit: (a) Total emissions of lead from the Floor Pouring, Cooling, Shakeout, and Knockout operations shall not exceed 0.83 ton per twelve (12) consecutive month period, with compliance determined at the end of each month;
 (b) Total emissions of manganese from the Floor Pouring, Cooling, Shakeout, and Knockout operations shall not exceed 0.93 tons per twelve (12) consecutive month period, with compliance determined at the end of each month;
 (c) Total emissions of any combination of metal HAPs from the Floor Pouring, Cooling, Shakeout, and Knockout operations shall not exceed 1.14 tons per twelve (12) consecutive month period, with compliance determined at the end of each month;

Compliance with the above limits shall be determined using the equations in condition D.4.9(a)(1) through (3). Please attach supporting calculations and data used for determining HAP emissions reported.

YEAR:

Month	Column 1a	Column 1b	Column 1c	Column 2a	Column 2b	Column 2c
	Lead Emissions This Month (tons)	Manganese Emissions This Month (tons)	Total Metal HAP Emissions This Month (tons)	Lead Emissions Previous 11 Months (tons)	Manganese Emissions Previous 11 Months (tons)	Total Metal HAP Emissions Previous 11 Months (tons)

This Part 70 Operating Permit Quarterly Report consists of 2 pages.

This Part 70 Operating Permit Quarterly Report consists of 2 pages.

Month	Column 1a + Column 2a	Column 1b + Column 2b	Column 1c + Column 2c
	12 Month Total Lead Emissions (tons)	12 Month Total Mn Emissions (tons)	12 Month Total Metal HAP Emissions (tons)

- 9 No deviation occurred in this quarter.
- 9 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: Weil-McLain
 Source Address: 500 Blaine Street, Michigan City, Indiana 46360
 Mailing Address: 500 Blaine Street, Michigan City, Indiana 46360-2388
 Part 70 Permit No.: T091-6295-00020
 Facility: Floor Pouring, Cooling, Shakeout, and Knockout operations
 Parameter: Phenol, benzene, and total organic HAP emissions
 Limit: (a) Emissions of phenol from the Floor Pouring, Cooling and Shakeout operations combined shall not exceed 1.48 tons per twelve (12) consecutive month period, with compliance determined at the end of each month;
 (b) Emissions of benzene from the Floor Pouring, Cooling and Shakeout operations combined shall not exceed 1.48 tons per twelve (12) consecutive month period, with compliance determined at the end of each month;
 (c) Emissions of any combination of organic HAPs from the Floor Pouring, Cooling and Shakeout operations combined shall not exceed 1.48 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with the above limits shall be determined using the equations in condition D.4.9(b)(1) through (3). Please attach supporting calculations and data used for determining HAP emissions reported.

YEAR:

Month	Column 1a	Column 1b	Column 1c	Column 2a	Column 2b	Column 2c
	Phenol Emissions This Month (tons)	Benzene Emissions This Month (tons)	Total Organic HAP Emissions This Month (tons)	Phenol Emissions Previous 11 Months (tons)	Benzene Emissions Previous 11 Months (tons)	Total Organic HAP Emissions Previous 11 Months (tons)

This Part 70 Operating Permit Quarterly Report consists of 2 pages.

This Part 70 Operating Permit Quarterly Report consists of 2 pages.

Month	Column 1a + Column 2a	Column 1b + Column 2b	Column 1c + Column 2c
	12 Month Total Phenol Emissions (tons)	12 Month Total Benzene Emissions (tons)	12 Month Total Organic HAP Emissions (tons)

- 9 No deviation occurred in this quarter.
- 9 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: Weil-McLain
 Source Address: 500 Blaine Street, Michigan City, Indiana 46360
 Mailing Address: 500 Blaine Street, Michigan City, Indiana 46360-2388
 Part 70 Permit No.: T091-6295-00020
 Facility: Wheelabrator shot blast machine
 Parameter: Lead, manganese and total metal HAP emissions
 Limit: (a) Emissions of lead from the Wheelabrator shot blast machine shall not exceed 3.52 tons per twelve (12) consecutive month period, with compliance determined at the end of each month;
 (b) Emissions of manganese from the Wheelabrator shot blast machine shall not exceed 3.00 tons per twelve (12) consecutive month period, with compliance determined at the end of each month;
 (c) Emission of any combination of metal HAPs from the Wheelabrator shot blast machine 3.52 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with the above limits shall be determined using the equations in condition D.4.9(a)(4) through (6). Please attach supporting calculations and data used for determining HAP emissions reported.

YEAR:

Month	Column 1a	Column 1b	Column 1c	Column 2a	Column 2b	Column 2c
	Lead Emissions This Month (tons)	Manganese Emissions This Month (tons)	Total Metal HAP Emissions This Month (tons)	Lead Emissions Previous 11 Months (tons)	Manganese Emissions Previous 11 Months (tons)	Total Metal HAP Emissions Previous 11 Months (tons)

This Part 70 Operating Permit Quarterly Report consists of 2 pages.

This Part 70 Operating Permit Quarterly Report consists of 2 pages.

Month	Column 1a + Column 2a	Column 1b + Column 2b	Column 1c + Column 2c
	12 Month Total Lead Emissions (tons)	12 Month Total Mn Emissions (tons)	12 Month Total Metal HAP Emissions (tons)

- 9 No deviation occurred in this quarter.
- 9 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: Weil-McLain
 Source Address: 500 Blaine Street, Michigan City, Indiana 46360
 Mailing Address: 500 Blaine Street, Michigan City, Indiana 46360-2388
 Part 70 Permit No.: T091-6295-00020
 Facility: High Speed Continuous Sand Mixer
 Parameter: Xylene and total organic HAP emissions
 Limit: (a) The total emissions of xylene from the High Speed Continuous Sand Mixer shall not exceed 0.90 tons per twelve (12) consecutive month period, with compliance determined at the end of each month;
 (b) The total emissions of any combination of organic HAPs from the High Speed Continuous Sand Mixer shall not exceed 0.90 ton per twelve (12) consecutive month period, with compliance determined at the end of each month;

Compliance with the above limits shall be determined using the equations in condition D.4.9(b)(4) and (5). Please attach supporting calculations and data used for determining HAP emissions reported.

YEAR:

Month	Column 1a	Column 1b	Column 2a	Column 2b	Column 1a + Column 2a	Column 1b + Column 2b
	Xylene Emissions This Month (tons)	Total Organic HAP Emissions This Month (tons)	Xylene Emissions Previous 11 Months (tons)	Total Organic HAP Emissions Previous 11 Months (tons)	12 Month Total Xylene Emissions (tons)	12 Month Total Organic HAP Emissions (tons)

9 No deviation occurred in this quarter.

9 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: Weil-McLain
 Source Address: 500 Blaine Street, Michigan City, Indiana 46360
 Mailing Address: 500 Blaine Street, Michigan City, Indiana 46360-2388
 Part 70 Permit No.: T091-6295-00020
 Facility: Chill Iron shot blast machine
 Parameter: Lead, manganese and total metal HAP emissions
 Limit: (a) Emissions of lead from the Chill Iron shot blast machine shall not exceed 0.20 ton per twelve (12) consecutive month period, with compliance determined at the end of each month;
 (b) Emissions of manganese from the Chill Iron shot blast machine shall not exceed 0.17 ton per twelve (12) consecutive month period, with compliance determined at the end of each month;
 (c) Emissions of any combination of metal HAPs from the Chill Iron shot blast machine shall not exceed 0.20 ton per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with the above limits shall be determined using the equations in condition D.5.9. Please attach supporting calculations and data used for determining HAP emissions reported.

YEAR:

Month	Column 1a	Column 1b	Column 1c	Column 2a	Column 2b	Column 2c
	Lead Emissions This Month (tons)	Manganese Emissions This Month (tons)	Total Metal HAP Emissions This Month (tons)	Lead Emissions Previous 11 Months (tons)	Manganese Emissions Previous 11 Months (tons)	Total Metal HAP Emissions Previous 11 Months (tons)

This Part 70 Operating Permit Quarterly Report consists of 2 pages.

This Part 70 Operating Permit Quarterly Report consists of 2 pages.

Month	Column 1a + Column 2a	Column 1b + Column 2b	Column 1c + Column 2c
	12 Month Total Lead Emissions (tons)	12 Month Total Mn Emissions (tons)	12 Month Total Metal HAP Emissions (tons)

- 9 No deviation occurred in this quarter.
- 9 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: Weil-McLain
 Source Address: 500 Blaine Street, Michigan City, Indiana 46360
 Mailing Address: 500 Blaine Street, Michigan City, Indiana 46360-2388
 Part 70 Permit No.: T091-6295-00020
 Facility: Scrap handling rotary reclaimer
 Parameter: Lead, manganese and total metal HAP emissions
 Limit: (a) Emissions of lead from the scrap handling rotary reclaimer shall not exceed 0.32 ton per twelve (12) consecutive month period, with compliance determined at the end of each month;
 (b) Emissions of manganese from the scrap handling rotary reclaimer shall not exceed 0.27 ton per twelve (12) consecutive month period, with compliance determined at the end of each month;
 (c) Emissions of any combination of metal HAPs from the scrap handling rotary reclaimer shall not exceed 0.32 ton per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with the above limits shall be determined using the equations in condition D.6.7. Please attach supporting calculations and data used for determining HAP emissions reported.

YEAR:

Month	Column 1a	Column 1b	Column 1c	Column 2a	Column 2b	Column 2c
	Lead Emissions This Month (tons)	Manganese Emissions This Month (tons)	Total Metal HAP Emissions This Month (tons)	Lead Emissions Previous 11 Months (tons)	Manganese Emissions Previous 11 Months (tons)	Total Metal HAP Emissions Previous 11 Months (tons)

This Part 70 Operating Permit Quarterly Report consists of 2 pages.

This Part 70 Operating Permit Quarterly Report consists of 2 pages.

Month	Column 1a + Column 2a	Column 1b + Column 2b	Column 1c + Column 2c
	12 Month Total Lead Emissions (tons)	12 Month Total Mn Emissions (tons)	12 Month Total Metal HAP Emissions (tons)

- 9 No deviation occurred in this quarter.
- 9 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: Weil-McLain
 Source Address: 500 Blaine Street, Michigan City, Indiana 46360
 Mailing Address: 500 Blaine Street, Michigan City, Indiana 46360-2388
 Part 70 Permit No.: T091-6295-00020
 Facility: No Bake core making operation
 Parameter: Xylene and total HAP emissions
 Limit: (a) The total emissions of xylene from the No Bake core making operation shall not exceed 0.80 tons per twelve (12) consecutive month period, with compliance determined at the end of each month;
 (b) The total emissions of any combination of HAPs from the No Bake core making operation shall not exceed 0.80 ton per twelve (12) consecutive month period, with compliance determined at the end of each month;

Compliance with the above limits shall be determined using the equations in condition D.7.7(1) and (2). Please attach supporting calculations and data used for determining HAP emissions reported.

YEAR:

Month	Column 1a	Column 1b	Column 2a	Column 2b	Column 1a + Column 2a	Column 1b + Column 2b
	Xylene Emissions This Month (tons)	Total HAP Emissions This Month (tons)	Xylene Emissions Previous 11 Months (tons)	Total HAP Emissions Previous 11 Months (tons)	12 Month Total Xylene Emissions (tons)	12 Month Total HAP Emissions (tons)

- 9 No deviation occurred in this quarter.
- 9 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: Weil-McLain
 Source Address: 500 Blaine Street, Michigan City, Indiana 46360
 Mailing Address: 500 Blaine Street, Michigan City, Indiana 46360-2388
 Part 70 Permit No.: T091-6295-00020
 Facility: Warm Box core making operation
 Parameter: Ethylene glycol, phenol, and total HAP emissions
 Limit: (a) The total emissions of ethylene glycol from the Warm Box core making operation shall not exceed 5.22 tons per twelve (12) consecutive month period, with compliance determined at the end of each month;
 (b) The total emissions of phenol from the Warm Box core making operation shall not exceed 4.03 tons per twelve (12) consecutive month period, with compliance determined at the end of each month;
 (c) The total emissions of any combination of HAPs from the Warm Box core making operation shall not exceed 5.22 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with the above limits shall be determined using the equations in condition D.7.7(3) through (5). Please attach supporting calculations and data used for determining HAP emissions reported.

YEAR:

Month	Column 1a	Column 1b	Column 1c	Column 2a	Column 2b	Column 2c
	Ethylene glycol Emissions This Month (tons)	Phenol Emissions This Month (tons)	Total HAP Emissions This Month (tons)	Ethylene glycol Emissions Previous 11 Months (tons)	Phenol Emissions Previous 11 Months (tons)	Total HAP Emissions Previous 11 Months (tons)

This Part 70 Operating Permit Quarterly Report consists of 2 pages.

This Part 70 Operating Permit Quarterly Report consists of 2 pages.

Month	Column 1a + Column 2a	Column 1b + Column 2b	Column 1c + Column 2c
	12 Month Total Ethylene glycol Emissions (tons)	12 Month Total Phenol Emissions (tons)	12 Month Total HAP Emissions (tons)

- 9 No deviation occurred in this quarter.
- 9 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: Weil-McLain
Source Address: 500 Blaine Street, Michigan City, Indiana 46360
Mailing Address: 500 Blaine Street, Michigan City, Indiana 46360-2388
Part 70 Permit No.: T091-6295-00020

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 Significant Permit
Modification.

Source Description and Location

Source Name:	Weil-McLain
Source Location:	500 Blaine Street, Michigan City, IN 46360
County:	La Porte
SIC Code:	3321
Operation Permit No.:	T 091-6295-00020
Operation Permit Issuance Date:	December 30, 2002
Significant Permit Modification No.:	091-26372-00020
Permit Reviewer:	Josiah Balogun

Existing Approvals

The source was issued Part 70 Operating Permit No. T091-6295-00020 on December 30, 2002. The source has since received the following approvals:

- (a) First Significant Permit Modification No. 091-20949-00020, issued on April 19, 2007; and
- (b) Administrative Amendment No. 091-24327-00020, issued on June 11, 2007.

County Attainment Status

The source is located in La Porte County.

Pollutant	Designation
SO ₂	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O ₃	Attainment effective July 19, 2007, for the 8-hour ozone standard. ¹
PM ₁₀	Unclassifiable effective November 15, 1990.
NO ₂	Cannot be classified or better than national standards.
Pb	Not designated.
¹ Unclassifiable or attainment effective November 15, 1990, for the 1-hour standard which was revoked effective June 15, 2005. Unclassifiable or attainment effective April 5, 2005, for PM _{2.5} .	

- (a) Ozone Standards
 - (1) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 revoking the one-hour ozone standard in Indiana.
 - (2) On September 6, 2007, the Indiana Air Pollution Control Board finalized a temporary emergency rule to re-designate Allen, Clark, Elkhart, Floyd, LaPorte, St. Joseph as attainment for the 8-hour ozone standard.

- (3) On November 9, 2007, the Indiana Air Pollution Control Board finalized a temporary emergency rule to re-designate Boone, Clark, Elkhart, Floyd, LaPorte, Hamilton, Hancock, Hendricks, Johnson, Madison, Marion, Morgan, Shelby, and St. Joseph as attainment for the 8-hour ozone standard.
- (4) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to ozone. La Porte 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.
- (b) **PM2.5**
 La Porte County has been classified as attainment for PM2.5. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM2.5 emissions. Therefore, until the U.S. EPA adopts specific provisions for PSD review for PM2.5 emissions, it has directed states to regulate PM10 emissions as a surrogate for PM2.5 emissions.
- (c) **Other Criteria Pollutants**
 La Porte County has been classified as attainment or unclassifiable in Indiana for all criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (d) **Fugitive Emissions**
 Since this type of operation is in one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3, fugitive emissions are counted toward the determination of PSD and Emission Offset applicability.

Source Status

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

Pollutant	Emissions (tons/year)
PM	613.90
PM10	375.99
SO ₂	2.84
VOC	231.79
CO	412.23
NO _x	29.05

- (a) This existing source is a major stationary source, under PSD (326 IAC 2-2), because a regulated pollutant is emitted at a rate of 100 tons per year or more, and it is one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1).
- (b) These emissions are based upon First Significant Permit Modification No. 091-20949-00020, issued on April 19, 2007.

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

HAPs	Potential To Emit (tons/year)
Single HAP	less than 10
Total HAPs	less than 25

This existing source is not a major source of HAPs, as defined in 40 CFR 63.41, because HAPs emissions are less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA).

Description of Proposed Modification

The Office of Air Quality (OAQ) has reviewed a modification application, submitted by Weil-McLain on April 2, 2008, relating to the existing A-Line sand handling system to be modified to include the addition of a sand cooler. The emissions from the sand cooler will be controlled by baghouse No. 36-1-Dc-8, which controls emissions from the A-Line sand handling system. The sand cooler will be part of the sand handling system, so there will be no change in the potential to emit for the sand handling system. The following is a list of the proposed emission unit and pollution control device:

- (a) One (1) sand cooler constructed in 2008, with maximum capacity of 200 tons of sand per hour, with emissions controlled by one (1) baghouse (ID No. 36-1-DC-8) and exhausting through stack 36-1-DC-8.

Enforcement Issues

There are no pending enforcement actions related to this modification.

Emission Calculations

See Appendix A of this document for detailed emission calculations.

Permit Level Determination – Part 70

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

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

Pollutant	Potential To Emit (tons/year)
PM	0
PM10	0
SO ₂	0
VOC	0
CO	0
NO _x	0

This modification to the existing sand handling system will not result in any increase in PTE. Therefore this modification is exempt from source modification. The modification will be incorporated into the Part 70 Operating Permit through a Significant Permit Modification pursuant to 326 IAC 2-7-12(d) because this permit modification requires a case-by-case determination of emission limit.

Permit Level Determination – PSD

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

Process/Emission Unit	PM (tons/yr)	PM10 (tons/yr)	SO ₂ (tons/yr)	VOC (tons/yr)	CO (tons/yr)	NO _x (tons/yr)
A Line Sand Handling System	0	0	0	0	0	0
Total for Modification	----	---	---	---	---	----
Significant Level	25	15	40	40	100	40

This modification to an existing major stationary source is not major because there is no increase in emission. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

The A Line sand cooler is part of the existing sand handling and there is no change in the potential to emit (PTE) of the sand handling because there is no change in the emission of the baghouse controlling the sand handling system.

Federal Rule Applicability Determination

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this proposed modification.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) applicable to this proposed modification.
- (c) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to new or modified emission units that involve a pollutant-specific emission unit and meet the following criteria:
 - (1) has a potential to emit before controls equal to or greater than the major source threshold for the pollutant involved;
 - (2) is subject to an emission limitation or standard for that pollutant; and
 - (3) uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.

The emission unit has the potential to emit regulated pollutants (uncontrolled) less than the major source thresholds.

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are not applicable to the sand cooler as part of this modification.

State Rule Applicability Determination

326 IAC 2-2 (PSD)

PSD applicability is discussed under the Permit Level Determination - PSD section.

Compliance Determination and Monitoring Requirements

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

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

There are no changes to the Compliance Determination and Monitoring Requirements.

Proposed Changes

The changes listed below have been made to Part 70 Operating Permit No. T091-6295-00020. Deleted language appears as ~~strike throughs~~ and new language appears in **bold**:

Change 1 The sand cooler has been added to the emission units in Section A.2 and Section D.2.

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

.....
(e) *****

- (3) **One (1) sand cooler constructed in 2008, with maximum capacity of 200 tons of sand per hour, with emissions controlled by one (1) baghouse (ID No. 36-1-DC-8) and exhausting through stack 36-1-DC-8.**
- (34) one (1) metal pouring operation (ID No. A-Line Pouring), installed in 1964, with a maximum throughput of 24 tons per hour of molten metal, and a maximum throughput of 10 tons of core sand per hour, exhausting through stack 36-E-12;
- (45) one (1) metal cooling operation (ID No. A-Line Cooling), installed in 1964, with a maximum throughput of 24 tons per hour of molten metal, and a maximum throughput of 10 tons of core sand per hour, exhausting through exhaust fans 32-E-2 and 32-E-1; and
- (56) one (1) mold and casting shakeout operation (ID No. A-Line Shakeout), installed in 1964, with a maximum metal casting throughput of 24 tons per hour, and a maximum throughput of 10 tons of core sand per hour, controlled by one (1) baghouse (ID No. 36-1-DC-8), exhausting through one (1) stack (ID No. 36-1-DC-8);

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(e) *****

- (3) **one (1) sand cooler constructed in 2008, with maximum capacity of 200 tons of sand per hour, with emissions controlled by one (1) baghouse, identified as 36-1-DC-8) and exhausting through stack, identified as 36-1-DC-8;**
- (34) one (1) metal pouring operation (ID No. A-Line Pouring), installed in 1964, with a maximum throughput of 24 tons per hour of molten metal, and a maximum throughput of 10 tons of core sand per hour, exhausting through stack 36-E-12;
- (45) one (1) metal cooling operation (ID No. A-Line Cooling), installed in 1964, with a maximum throughput of 24 tons per hour of molten metal, and a maximum throughput of 10 tons of core sand per hour, exhausting through exhaust fans 32-E-2 and 32-E-1; and
- (56) one (1) mold and casting shakeout operation (ID No. A-Line Shakeout), installed in 1964, with a maximum metal casting throughput of 24 tons per hour, and a maximum throughput of 10 tons of core sand per hour, controlled by one (1) baghouse (ID No. 36-1-DC-8), exhausting through one (1) stack (ID No. 36-1-DC-8);

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

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

Change 2 A limit has been incorporated in to Condition D.2.1 of the permit to limit the PM10 emissions from baghouse, identified as 36-1-DC-8 to less than 15 tons per year.

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

D.2.1 PSD Minor Limit [326 IAC 2-2]

- (a) ~~The total PM emissions from the baghouse, identified as 36-1-DC-8 controlling A-Line sand cooler, A-Line Muller and A-Line Holding Silo, both installed in 1984, shall not exceed 0.107 pound per ton of sand throughput.~~
- (b) **The total PM10 emissions from the baghouse, identified as 36-1-DC-8 controlling the A-Line sand cooler, A-Line Muller and A-Line Holding silo, shall not exceed 0.064 pounds per ton of sand throughput.**
- (bc) The throughput of sand to the A-Line Muller and A-Line Holding Silo shall not exceed 464,200 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with ~~this~~ **these** emission limits and the sand throughput limit, ~~limits will limit~~ **PM and PM10** emissions to less than 25 **and 15** tons per year, **respectively**. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable.

Change 2 The sand cooler that was added to the permit has been incorporated in to Condition D.2.2, D.2.7, D.2.9, D.2.10, D.2.12 and the Compliance Section of the permit.

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

Emission Unit ID	Process Weight (tons/hr)	Allowable Particulate Emissions (lb/hr)
A-Line Pouring	234.00*	60.23
A-Line Cooling	234.00*	60.23
A-Line Shakeout	234.00*	60.23
A-Line Muller & Sand Handling (including A-Line Holding Silo and sand cooler)	200.00	58.51

* Includes 24 tons per hour metal, 200 tons per hour mold sand, and 10 tons per hour core throughput.

- (b) For purposes of determining compliance with the particulate emission limits pursuant to 326 IAC 6-3-2 for the A-Line Shakeout and the A-Line Muller & Sand Handling (including the A-Line Holding Silo **and sand cooler**), all exhausting through baghouse 36-1-DC-8, the allowable particulate emission rate from baghouse 36-1-DC-8 shall be limited to 118.74 pounds per hour.

D.2.7 Particulate Matter (PM) and HAPs

- (a) In order to comply with Conditions D.2.1, D.2.2, and D.2.3, the baghouse (ID 36-1-DC-8) for PM, PM10, and metallic HAP control shall be in operation and control emissions from the A-Line Shakeout operation and the A-Line Holding Silo, **sand cooler** and Muller at all times that the A-Line Shakeout operation and the A-Line Holding Silo, **sand cooler** and Muller are in operation.
-

D.2.9 Visible Emissions Notations

- (a) Visible emission notations of the A-Line pouring and cooling operations and the stack exhaust for the baghouse (ID 36-1-DC-8) controlling the A-Line Holding Silo, **sand cooler** and Muller, and the A-Line Shakeout operation shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
-

D.2.10 Parametric Monitoring

The Permittee shall record the pressure drop across the baghouse used in conjunction with the A-Line Shakeout operation and the A-Line Holding Silo, **sand cooler** and Muller, at least once per day when the A-Line Shakeout operation and the A-Line Holding Silo, **sand cooler** and Muller are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 2.0 and 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 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.

D.2.12 Record Keeping Requirements

- (a) To document compliance with Condition D.2.1(b), the Permittee shall maintain records of the sand throughput to the A-Line Muller, **sand cooler** and A-Line Holding Silo for each month;
- (b) To document compliance with Condition D.2.9, the Permittee shall maintain records of visible emission notations of the A-Line pouring and cooling operations and the stack exhaust for the baghouse controlling the A-Line Holding Silo, **sand cooler** and Muller, and the A-Line Shakeout operation once per day. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).
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**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Quarterly Report

Source Name: Weil-McLain
Source Address: 500 Blaine Street, Michigan City, Indiana 46360
Mailing Address: 500 Blaine Street, Michigan City, Indiana 46360-2388
Part 70 Permit No.: T091-6295-00020
Facility: A-Line Muller
Parameter: PM emissions
Limit: The throughput of sand to the A-Line Muller, **sand cooler** and A-Line Holding Silo shall not exceed 464,200 tons per twelve (12) consecutive month period.

Other Changes

Upon further review IDEM, OAQ has made the following changes to the Title V permit T091-6295-00020. (deleted language appears as ~~strikeout~~ and the new language **bolded**):

Change 1 La Porte County has been designated as an attainment County, therefore, the nonattainment status and the Emission Offset rule have been deleted from Section A.1 of the permit.

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 gray iron foundry producing gray iron boilers.

Source Address:	500 Blaine Street, Michigan City, IN 46360
Mailing Address:	500 Blaine Street, Michigan City, IN 46360-2388
General Source Phone Number:	219-879-6561
SIC Code:	3321
County Location:	LaPorte
Source Location Status:	Nonattainment for ozone under the 8-hour standard Attainment for all other criteria pollutants
Source Status:	Part 70 Operating Permit Program Major Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act 1 of 28 Source Categories

Change 2 IDEM has determined that the Permittee is not required to keep records of all preventive maintenance. However, where the Permittee seeks to demonstrate that an emergency has occurred, the Permittee must provide, upon request, records of preventive maintenance in order to establish that the lack of proper maintenance did not cause or contribute to the deviation. Therefore, IDEM has deleted part of paragraph (a) of Condition B.10 – Preventive Maintenance Plan.

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]

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

~~Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2254~~

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

Change 3 For clarification purposes, Condition B.20 - Operational Flexibility has been revised.

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

(f) This condition does not apply to emission trades of SO₂ or NO_x under 326 IAC 21 or 326 IAC 10-4.

Change 4 The last sentence in Condition C.3 - Open Burning has been deleted because this condition is now federally enforceable and is included in Indiana's State Implementation Plan (SIP).

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.~~

Change 5 On January 22, 2008 U.S. EPA promulgated a rule to address the remand, by the U.S. Court of Appeals for the District of Columbia on June 25, 2005, of the reasonable possibility provisions of the December 31, 2002 major NSR reform rule. IDEM has agreed, with U.S. EPA, to interpret "reasonable possibility" in 326 IAC 2-2 and 326 IAC 2-3 consistent with the January 22, 2008 U.S. EPA rule. To implement this interpretation, IDEM is revising Section C - General Record Keeping Requirements and Section C - General Reporting Requirements.

C.17 General Record Keeping Requirements[326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-2] [326 IAC 2-3]

(c) If there is a reasonable possibility (as defined in 40 CFR 51.165 (a)(6)(vi)(A), 40 CFR 51.165 (a)(6)(vi)(B), 40 CFR 51.166 (r)(6)(vi)(a), and/or 40 CFR 51.166 (r)(6)(vi)(b)) that a "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(II)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) 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:

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

(21) 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

- (32) 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.

Conclusion and Recommendation

The operation of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Permit Modification No. 091-26372-00020. The staff recommends to the Commissioner that this Part 70 Significant Permit Modification be approved.