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

Mr. David Boyd
Manchester Metals, LLC
P.O. Box 345
North Manchester, IN 46962

Re: 169-30355-00019
Significant Permit Modification to
Part 70 Renewal No.: T T169-23344-00019

Dear Mr. Boyd:

Manchester Metals, LLC was issued a Part 70 Operating Permit Renewal on September 26, 2007 for a stationary gray iron and steel foundry. A letter requesting changes to this permit was received on December 9, 2010. 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.

The modification consists of the addition of two isocure core machines, identified as ICM-L10(II) and ICM-L20(II).

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 Heath Hartley, OAQ, 100 North Senate Avenue, MC 61-53, Room 1003, Indianapolis, Indiana, 46204-2251, or call at (800) 451-6027, and ask for Heath Hartley or extension (2-8217), or dial (317) 232-8217.

Sincerely,

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

Attachments:
Updated Permit
Technical Support Document
PTE Calculations

hh

cc: File – Wabash County
Wabash County Health Department
U.S. EPA, Region V
Compliance and Enforcement Branch

Mr. W.D. Gabbard
Gabbard Environmental Services, Inc.
7611 Hope Farm Road
Fort Wayne, IN 46815

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Significant Permit Modification to a Part 70 Source
OFFICE OF AIR QUALITY

Manchester Metals, LLC
205 Wabash Road
North Manchester, Indiana 46962

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

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

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T169-23344-00019	
Issued by: Original Signed Nisha Sizemore, Chief Permits Branch Office of Air Quality	Issuance Date: September 26, 2007 Expiration Date: September 26, 2012

First Significant Source Modification No. 169-28742-00019, issued on April 6, 2010; and
First Significant Permit Modification No. 169-28847-00019, issued on May 13, 2010.

Second Significant Permit Modification No.: 169-30355-00019	
Issued by: Tripurari P. Sinha, Ph. D, Section Chief Permits Branch Office of Air Quality	Issuance Date: Expiration Date:

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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 and steel foundry source.

Source Address:	205 Wabash Road, North Manchester, Indiana 46962
General Source Phone Number:	(260)982-2191
SIC Code:	3321, 3325
County Location:	Wabash
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) scrap handling process, constructed in 1968, including one (1) bridge crane and one (1) scale, identified as process SI, exhausting inside, maximum capacity: 10 tons of metal per hour.

(b) One (1) melting and casting process consisting of the following emission units and pollution control devices:

(1) One (1) 1.16 million British thermal unit per hour natural gas-fired scrap charge preheater, constructed in 1970, identified as CP, exhausting inside the building, with some emissions controlled by the general ventilation baghouse DC1, and exiting through the general building exhaust and at stack S1.

(2) Three (3) electric induction (scrap iron) furnaces, constructed in 1973 and modified in 1995, identified as IF1, IF2, and IF3, exhausting inside the building, with some emissions voluntarily controlled by the general ventilation baghouse DC1, and exiting through the general building exhaust and at stack S1, maximum charge rate: 3.6 tons per hour, each, and 6.5 tons of iron per hour, total.

(3) One (1) electric induction (stainless steel) furnace, constructed in 1966, identified as IF4, maximum charge rate: 1.0 ton per hour.

(4) Four (4) natural gas-fired ladle heaters, constructed in 1970, identified as LH1, LH2, LH3, and LH4, combined maximum capacity: 2.6 million British thermal units per hour, total.

(5) One (1) molding, pouring and cooling line, identified as the disamatic molding/ pouring line, constructed in 1993, with no controls on emissions and the emissions are exhausted via the production building general ventilation, maximum capacity: 30 tons of molding sand and 5 tons of metal per hour.

(6) One (1) molding, pouring and cooling line, identified as the disaforma molding/ pouring line, constructed in 1986, with no controls on emissions and the emissions are exhausted via the production building general ventilation, maximum capacity: 60 tons of molding sand and 10 tons of metal per hour.

(7) One (1) molding, pouring and cooling line, identified as the pallet line and floor stations, constructed prior to 1973, with no controls on emissions and the emissions are exhausted via the production building general ventilation, maximum capacity: 6 tons of molding sand and 1 ton of metal per hour.

(c) One (1) shakeout operation, constructed in 1973, identified as operation CCS, with emissions controlled by baghouse DC2 and exhausting through stack S2, maximum capacity: 80 tons of sand and 10 tons of metal per hour.

(d) One (1) cleaning and finishing process consisting of the following emission units and pollution control devices:

(1) One (1) casting cleaner shotblaster, constructed in 1968, identified as CCL1, with emissions controlled by baghouse DC4 and exhausting through stack S4, maximum capacity: 1.0 ton of castings per hour.

(2) One (1) casting cleaner shotblaster, constructed in 1968, identified as CCL2, with emissions controlled by baghouse DC6 and exhausting through stack R5, maximum capacity: 3.0 tons of castings per hour.

(3) One (1) shot blast cleaner, constructed in 1974, identified as CCL3, with PM and PM_{10} emissions controlled by baghouse DC7 and exhausting through stack S10, maximum capacity: 2.5 tons of castings per hour.

(4) Seven (7) pedestal wheel grinders, with six (6) constructed in 1993 and one (1) constructed in 1994, identified as GR1, GR2, GR5, GR6, GR7, GR8, and GR9, with PM and PM_{10} emissions from all of the grinders controlled by baghouse DC6 and exhausting through stack R5, maximum throughput: 0.25 ton of castings per hour, each.

(5) Two (2) dual wheel grinders, constructed in 1993, identified as GR3 and GR4, with emissions from both grinders controlled by baghouse DC6 and exhausting through stack R5, maximum throughput: 0.5 ton of castings per hour, each.

(6) One (1) 3.2 million British thermal unit per hour natural gas-fired annealing oven, constructed in 1967, identified as HT1, exhausting through stack S9, maximum capacity: 1.5 tons of iron per hour.

(e) Sand handling, core making and molding making processes consisting of the following emission units and pollution control devices:

(1) The following mold making processes:

(A) One (1) mold sand handling system, constructed in 1965, identified as MSH, with a maximum capacity of 100 tons of sand per hour, consisting of the following:

(i) One (1) muller, constructed in 1987, with emissions controlled by baghouse DC3 and exhausting through stack S6 or returned inside through stack S6R;

(ii) Three (3) storage silos, constructed in 1960; and

(iii) Conveyors with emissions controlled by baghouse DC3 and exhausting through stack S6 or returned inside through stack S6R.

(B) Two (2) mold making lines, identified as DM1, one constructed in 1986 with a maximum capacity of 60 tons of sand per hour and one constructed in 1993 with a maximum capacity of 30 tons of sand per hour. Only sand, clay and water are used in the mold making operation.

(C) One (1) pallet molding operation, constructed in 1965, maximum capacity: 5 tons of sand per hour. Only sand, clay and water are used in the mold making operation.

(2) The following North isocure core making processes:

(A) One (1) core sand handling system, constructed in 1970, identified as CSH-North, with a maximum capacity of 10 tons of sand per hour, consisting of the following:

(i) One (1) storage silo, equipped with a bin vent filter; and

(ii) Two (2) surge hoppers, equipped with an after filter.

(B) One (1) isocure core machine, approved in 2010 for construction, identified as ICM-L10, maximum capacity: 1.5 ton of sand per hour, 24 pounds of resin per hour, and 2.1 pounds of catalyst (Dimethylethylamine) per hour, with catalyst emissions controlled by a voluntary fume scrubber, exhausting through stack S8.

(C) One (1) isocure core machine, permitted in 2011, identified as ICM-L10(II), maximum capacity: 1.5 ton of sand per hour, 24 pounds of resin per hour, and 2.1 pounds of catalyst (Dimethylethylamine) per hour, with catalyst emissions controlled by a voluntary fume scrubber, exhausting through stack S8.

(3) The following South isocure core making processes:

(A) One (1) core sand handling system, constructed in 2006, identified as CSH-South, with a maximum capacity of 1.5 tons of sand per hour, consisting of the following:

(i) One (1) storage silo, constructed in 2007, equipped with a bin vent filter; and

(ii) One (1) surge hopper.

(B) One (1) isocure core machine, constructed in 2006, identified as ICM-L20, with catalyst emissions controlled by a voluntary fume scrubber, exhausting to stack LA-1, maximum capacity: 1.5 tons of sand per hour, 24 pounds of resin per hour, and 2.1 pounds of non-HAP catalyst per hour.

(C) One (1) isocure core machine, approved in 2011 for construction, identified as ICM-L20(II), maximum capacity: 1.5 ton of sand per hour, 24 pounds of resin per hour, and 2.1 pounds of catalyst (Dimethylethylamine) per hour, with catalyst emissions controlled by a voluntary fume scrubber, exhausting

through stack LA2.

(4) The following shell core making processes:

(A) One (1) bucket elevator for shell core sand, identified as SSH-North, constructed in 1981, equipped with a filter, maximum capacity: 2.0 tons of sand per hour.

(B) Ten (10) shell core making machines, seven (7) constructed in 1981 and three (3) constructed in 2005, identified as SCM, maximum capacity: 2.0 tons of pre-mixed sand per hour, each and total.

(5) One (1) air set core machine, constructed in 1997, identified as ACM, maximum capacity: 1.5 tons of sand, 3.91 pounds of alphaset and 1.30 pounds of alphacure per hour.

(6) One (1) 0.5 million British thermal unit per hour (MMBtu/hr) natural gas-fired core baking oven, constructed in 1970, identified as CM Oven, exhausting through two (2) stacks, identified as S7A and S7B.

(f) Inoculation operations, operating since approximately 1973, exhausting inside the building, with some emissions voluntarily controlled by the general ventilation baghouse DC1, and exiting through the general building exhaust and at stack S1, maximum capacity: 10 tons of metal per hour.

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) Degreasing operations that do not exceed 145 gallons per 12 month period, except if subject to 326 IAC 20-6, including one (1) parts washer, constructed in 1987, equipped with a lid. There are no HAPs or halogenated solvents used in the degreasing operations. [326 IAC 8-3-2]

(b) Paved and unpaved roads and parking lots with public access. [326 IAC 6-4]

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, T 169-23344-00019, 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. 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) A certification required by this permit meets the requirements of 326 IAC 2-7-6(1) if:

(i) it contains a certification by a responsible official", as defined by 326 IAC 2-7-1(34), and

(ii) the certification states that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) The Permittee may use the attached Certification Form, or its equivalent, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.

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

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

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

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

and

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

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

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

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

(2) The compliance status;

(3) Whether compliance was continuous or intermittent;

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

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

The submittal by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "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) A Preventive Maintenance Plan meets the requirements of 326 IAC 1-6-3 if it includes, at a minimum:

(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.

The Permittee shall implement the PMPs.

(b) If required by specific condition(s) in Section D of this permit where no PMP was previously required, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than ninety (90) days after issuance of this permit or ninety (90) days after initial start-up, whichever is later, including the following information on each facility:

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

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

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

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

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

The PMP extension notification does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by the "responsible official" as defined by 326 IAC 2-7-1 (34).

The Permittee shall implement the PMPs.

(c) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions. The PMPs and their submittal do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1 (34).

(d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

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

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.

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

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

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

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

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

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

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

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

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

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

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "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.

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) In addition to the nonapplicability determinations set forth in Sections D of this permit, the IDEM, OAQ has made the following determinations regarding this source:

The requirement from F 169-6298-00019, issued on June 25, 1997, Condition C.1, listing requirements pursuant to 326 IAC 2-8, is not applicable because this source has requested a Title V, Part 70, Operating Permit. Therefore, the source is subject to 326 IAC 2-7, Part 70, and the 326 IAC 2-8, FESOP, limits are not required.

(c) 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.

(d) 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.

(e) 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.

(f) 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).

(g) 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)]

(h) 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 T 169-23344-00019 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 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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "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.16 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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

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

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

(1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

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

(c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified, pursuant to 326 IAC 2-7-4(a)(2)(D), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.17 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
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Any such application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "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.18 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 or notice 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.19 Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]

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

(1) The changes are not modifications under any provision of Title I of the Clean Air Act;

(2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;

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

(4) The Permittee notifies the:

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

and

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

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

(5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-7-20(b),(c), or (e). The Permittee shall make such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ in the notices specified in 326 IAC 2-7-20(b)(1), (c)(1), and (e)(2).

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

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

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

(3) Any change in emissions; and

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

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1)by a by a “responsible official” as defined by 326 IAC 2-7-1(34).

(c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).

(d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.

(e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.20 Source Modification Requirement [326 IAC 2-7-10.5] [326 IAC 2-2-2] [326 IAC 2-3-2]

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

B.21 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.22 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

(a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

(b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

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

Any such application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "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.23 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.24 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 one hundred (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 5-1-1 (Applicability) and 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 except as provided in 326 IAC 4-2 or in this permit. The Permittee shall not operate a refuse incinerator or refuse burning equipment except as provided in 326 IAC 9-1-2 or in this permit.

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

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

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

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted by using ambient air quality modeling pursuant to 326 IAC 1-7-4. The provisions of 326 IAC 1-7-1(3), 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4, and 326 IAC 1-7-5(a), (b), and (d) are not federally enforceable.

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

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

asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

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

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, 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 that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

(e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

(f) Demolition and Renovation
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).

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

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

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

(a) For performance testing required by this permit, a test protocol, except as provided elsewhere in this permit, shall be submitted to:

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

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

Compliance Requirements [326 IAC 2-1.1-11]

C.9 Compliance Requirements [326 IAC 2-1.1-11]

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

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

C.10 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Unless otherwise specified in this permit, for all monitoring requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or of initial start-up, whichever is later, to begin such monitoring. If due to circumstances beyond the Permittee's control, any monitoring equipment required by this permit cannot be installed and operated no later than ninety (90) days after permit issuance or the date of initial startup, whichever is later, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

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

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

The notification which shall be submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

C.11 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 maintain the most recently submitted written emergency reduction plans (ERPs) consistent with safe operating procedures.

(b) Upon direct notification by IDEM, OAQ that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level.
[326 IAC 1-5-3]

C.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]

Upon detecting an excursion where a response step is required by the D Section or an exceedance of a limitation in this permit:

(a) The Permittee shall take reasonable response steps to 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 excess emissions.

(b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:

(1) initial inspection and evaluation;

(2) recording that operations returned or are returning 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 normal or usual manner of operation.

(c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:

(1) monitoring results;

(2) review of operation and maintenance procedures and records; and/or

(3) inspection of the control device, associated capture system, and the process.

(d) Failure to take reasonable response steps shall be considered a deviation from the permit.

(e) The Permittee shall record the reasonable responses steps 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 submit a description of its response actions to IDEM, OAQ, no later than seventy-five (75) days after the date of the test.

(b) A retest to demonstrate compliance shall be performed no later than one hundred eighty (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred eighty (180) 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 a certification that meets the requirements of 326 IAC 326 IAC 2-7-6(1) by a "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]

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 a certification that meets the requirements of 326 IAC 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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, for all record keeping requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.

(c) If there is a reasonable possibility (as defined in 40 CFR 51.165 (a)(6)(vi)(A), 40 CFR 51.165 (a)(6)(vi)(B), 40 CFR 51.166 (r)(6)(vi)(a), and/or 40 CFR 51.166 (r)(6)(vi)(b)) that a "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(ll)) affecting an existing emissions other than 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/or 326 IAC 2-3-1(z)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(rr) and/or 326 IAC 2-3-1(mm)), the Permittee shall comply with the following:

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

(A) A description of the project.

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

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

(i) Baseline actual emissions;

(ii) Projected actual emissions;

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

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

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

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

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

C.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 except that 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. This report shall be submitted not later than thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

(b) The address for report submittal is:

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

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

(d) 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.

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

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

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

(f) The report for project at an existing emissions unit shall be submitted no later than sixty (60) days after the end of the year and contain the following:

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

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

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

(4) Any other information that the Permittee wishes to include in this report such as an explanation as to why the emissions differ from the preconstruction projection.

Reports required in this part shall be submitted to:

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

(g) 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 applicable standards for recycling and emissions reduction.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

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

(a) One (1) scrap handling process, constructed in 1968, including one (1) bridge crane and one (1) scale, identified as process SI, exhausting inside, maximum capacity: 10 tons of metal per hour.

(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 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the scrap handling process shall not exceed 19.2 pounds per hour, when operating at a process weight rate of 10 tons of metal per hour. The pounds per hour limitation was calculated using 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:

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

D.1.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan is required for this facility. Section B - Preventative Maintenance Plan contains the Permittee's obligation with regard to the preventative maintenance plan required by this condition.

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Melting, Casting and Shakeout

(b) One (1) melting and casting process consisting of the following emission units and pollution control devices:

(1) One (1) 1.16 million British thermal unit per hour natural gas-fired scrap charge preheater, constructed in 1970, identified as CP, exhausting inside the building, with some emissions controlled by the general ventilation baghouse DC1, and exiting through the general building exhaust and at stack S1.

(2) Three (3) electric induction (scrap iron) furnaces, constructed in 1973 and modified in 1995, identified as IF1, IF2, and IF3, exhausting inside the building, with some emissions voluntarily controlled by the general ventilation baghouse DC1, and exiting through the general building exhaust and at stack S1, maximum charge rate: 3.6 tons per hour, each, and 6.5 tons of iron per hour, total.

(3) One (1) electric induction (stainless steel) furnace, constructed in 1966, identified as IF4, maximum charge rate: 1.0 ton per hour.

(4) Four (4) natural gas-fired ladle heaters, constructed in 1970, identified as LH1, LH2, LH3, and LH4, combined maximum capacity: 2.6 million British thermal units per hour, total.

(5) One (1) molding, pouring and cooling line, identified as the disamatic molding/pouring line, constructed in 1993, with no controls on emissions and the emissions are exhausted via the production building general ventilation, maximum capacity: 30 tons of molding sand and 5 tons of metal per hour.

(6) One (1) molding, pouring and cooling line, identified as the disaforma molding/pouring line, constructed in 1986, with no controls on emissions and the emissions are exhausted via the production building general ventilation, maximum capacity: 60 tons of molding sand and 10 tons of metal per hour.

(7) One (1) molding, pouring and cooling line, identified as the pallet line and floor stations, constructed prior to 1973, with no controls on emissions and the emissions are exhausted via the production building general ventilation, maximum capacity: 6 tons of molding sand and 1 ton of metal per hour.

(c) One (1) shakeout operation, constructed in 1973, identified as operation CCS, with emissions controlled by baghouse DC2 and exhausting through stack S2, maximum capacity: 80 tons of sand and 10 tons of metal per hour.

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

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

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

(a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the three (3) electric induction furnaces for melting iron (IF1 through IF3) shall not exceed 9.67 pounds per hour, each, when operating at a process weight rate of 3.6 tons of metal per hour, each.

(b) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the molding, pouring and cooling operations at the one (1) disamatic molding/pouring line shall not exceed 41.3 pounds per hour, when operating at a process weight rate of 35 tons of sand and metal per hour.

(c) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the molding, pouring and cooling operations at the one (1) disaforma molding/pouring line shall not exceed 47.8 pounds per hour, when operating at a process weight rate of 70 tons of sand and metal per hour.

(d) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the molding, pouring and cooling operations at the one (1) pallet line and floor stations shall not exceed 15.1 pounds per hour, when operating at a process weight rate of 7.0 tons of sand and metal per hour.

(e) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the shakeout operation (CCS) exhausting to baghouse DC2 shall not exceed 50.2 pounds per hour, when operating at a process weight rate of 90 tons of sand and metal per hour.

The pounds per hour limitations were calculated using the following equations:

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

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

or

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

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

D.2.2 PSD Minor Limit [326 IAC 2-2]

(a) The Permittee shall comply with the following limitations for the one (1) disaforma molding/ pouring line:

(1) Pursuant to T 169-9014-00019, issued on May 14, 2002, the throughput of metal at the pouring and cooling operations at the one (1) disaforma molding/pouring line shall be less than 11,826 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

(2) Pursuant to T 169-9014-00019, issued on May 14, 2002, and as revised by this permit, the total PM emission rate from the pouring and cooling operations shall not exceed 4.2 pounds per ton of metal throughput, and the total PM_{10} emission rate from the pouring and cooling operations shall not exceed 2.53 pounds per ton of metal throughput.

(3) Pursuant to this permit, the CO emission rate from the pouring and cooling operations shall not exceed 6.0 pounds per ton of metal throughput.

These limitations limit the potential to emit of PM, PM_{10}, and CO from the combination of this facility and the one (1) mold making line, also constructed in 1986, to less than twenty-five (25) tons per year, fifteen (15) tons per year, and one hundred (100) tons per year,

respectively. Therefore, these limitations rendered the 1986 modification a minor modification, and the requirements of 326 IAC 2-2, PSD, are not applicable.

(b) The Permittee shall comply with the following limitations for the one (1) disamatic molding/ pouring line:

(1) Pursuant to this permit, the throughput of metal at the pouring and cooling operations at the one (1) disamatic molding/pouring line shall be less than 4,613 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

(2) Pursuant to T 169-9014-00019, issued on May 14, 2002, and revised by this permit, the PM emission rate from the pouring operation shall not exceed 4.2 pounds per ton of metal throughput and the PM_{10} emission rate shall not exceed 2.06 pounds per ton of metal throughput.

(3) Pursuant to T 169-9014-00019, issued on May 14, 2002, and revised by this permit, the PM and PM_{10} emission rates from the cooling operation shall not exceed 1.4 pounds per ton of metal throughput.

(4) Pursuant to this permit, the CO emission rate from the pouring and cooling operations shall not exceed 6.0 pounds per ton of metal throughput

These limitations, in combination with Condition D.3.2, shall limit the potential to emit PM, PM_{10} and CO from the total of the seven (7) pedestal wheel grinders, identified as GR1, GR2, GR5, GR6, GR7, GR8, and GR9, two (2) dual wheel grinders, identified as GR3 and GR4, one (1) disamatic molding/pouring line, and the one (1) mold making line, identified as part of DM1, all considered part of the same modification, to less than twenty-five (25) tons per year, fifteen (15) tons per year, and one hundred (100) tons per year, respectively. Therefore, these limitations rendered the 1993/1994 modification a minor modification to an existing major source, and the requirements of 326 IAC 2-2, PSD, are not applicable.

(c) The Permittee shall comply with the following limitations for the four (4) electric induction furnaces, IF1 through IF4:

(1) Pursuant to T 169-9014-00019, issued on May 14, 2002, the iron throughput to the total of the four (4) electric induction furnaces, IF1 through IF4, shall be less than 34,700 tons per consecutive twelve (12) month period, with compliance determined at the end of each month. Each ton of steel melted shall be considered equivalent to one tenth (0.1) ton of iron throughput.

(2) The PM emissions shall not exceed 0.9 pound per ton when melting iron and 0.1 pound per ton when melting steel, and the PM_{10} emissions shall not exceed 0.86 pound per ton when melting iron and 0.09 pound per ton when melting steel.

These limitations shall limit the potential to emit PM to less than twenty-five (25) tons per year, and the potential to emit PM_{10} to less than fifteen (15) tons per year, from the total of the four (4) furnaces, IF1 through IF4, rendering the 1995 modification a minor modification to an existing major source, pursuant to 326 IAC 2-2, PSD.

D.2.3 Emission Factor Limit

The total organic HAPs emissions shall be less than 0.016 pounds per pound of index material from pouring, cooling and shakeout using shell core sand.

D.2.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan is required for the four (4) electric induction furnaces, identified as IF1 through IF4, three (3) molding, pouring and cooling lines, and one (1) shakeout operation, identified as CCS, and the control device for the shakeout operation. Section B - Preventative Maintenance Plan contains the Permittee's obligation with regard to the preventative maintenance plan required by this condition.

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

D.2.5 Particulate Control [326 IAC 2-7-6(6)]

(a) In order to demonstrate compliance with Condition D.2.1(e), the baghouse (DC2) shall be in operation and control emissions from the shakeout process (CCS) at all times when the shakeout process is in operation.

(b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

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

D.2.6 Visible Emissions Notations

(a) Visible emission notations of the three (3) electric induction furnaces, identified as IF1 through IF3, three (3) molding, pouring and cooling lines, and one (1) shakeout operation, identified as CCS, stack exhausts (general ventilation and stack S2) 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. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.2.7 Baghouse Parametric Monitoring [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

The Permittee shall record the pressure drop across the baghouse (DC2) used in conjunction with the shakeout process (CCS), at least once per day when the shakeout process is in operation when venting to the atmosphere. When, for any one (1) reading, the pressure drop across the baghouse is outside the normal range of 1.0 and 5.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps 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 or replaced at least once every six (6) months.

D.2.8 Broken or Failed Bag Detection

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

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

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

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

D.2.9 Record Keeping Requirements

(a) To document the compliance status with Condition D.2.6, the Permittee shall maintain records of visible emission notations of the three (3) electric induction furnaces, identified as IF1 through IF3, three (3) molding, pouring and cooling lines, and one (1) shakeout operation, identified as CCS, stack exhausts 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 furnaces did not operate that day).

(b) To document the compliance status with Condition D.2.7, the Permittee shall maintain records once per day of the pressure drop across the baghouse (DC2) used in conjunction with the shakeout process (CCS). 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 shakeout did not operate that day).

(c) To document the compliance status with Condition D.2.2, the Permittee shall maintain monthly records of the:

(1) throughput of metal at the one (1) disaforma molding/pouring line;

(2) throughput of metal at the one (1) disamatic molding/pouring line; and

(3) total iron and steel throughput at the four (4) electric induction furnaces, IF1 through IF4.

(d) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required to be maintained by this condition.

D.2.10 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.2.2(a)(1), (b)(1) and (c)(1) shall be submitted, using the reporting forms located at the end of this permit, or their equivalent, not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a “responsible official” as defined by 326 IAC 2-7-1(34).

SECTION D.3 FACILITY OPERATION CONDITIONS

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

(d) One (1) cleaning and finishing process consisting of the following emission units and pollution control devices:

(1) One (1) casting cleaner shotblaster, constructed in 1968, identified as CCL1, with emissions controlled by baghouse DC4 and exhausting through stack S4, maximum capacity: 1.0 ton of castings per hour.

(2) One (1) casting cleaner shotblaster, constructed in 1968, identified as CCL2, with emissions controlled by baghouse DC6 and exhausting through stack R5, maximum capacity: 3.0 tons of castings per hour.

(3) One (1) shot blast cleaner, constructed in 1974, identified as CCL3, with emissions controlled by baghouse DC7 and exhausting through stack S10, maximum capacity: 2.5 tons of castings per hour.

(4) Seven (7) pedestal wheel grinders, with six (6) constructed in 1993 and one (1) constructed in 1994, identified as GR1, GR2, GR5, GR6, GR7, GR8, and GR9, with emissions from all of the grinders controlled by baghouse DC6 and exhausting through stack R5, maximum throughput: 0.25 ton of castings per hour, each.

(5) Two (2) dual wheel grinders, constructed in 1993, identified as GR3 and GR4, with emissions from both grinders controlled by baghouse DC6 and exhausting through stack R5, maximum throughput: 0.5 ton of castings per hour, each.

(6) One (1) 3.2 million British thermal unit per hour natural gas-fired annealing oven, constructed in 1967, identified as HT1, exhausting through stack S9, maximum capacity: 1.5 tons of iron per hour.

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

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

D.3.1 Particulate [326 IAC 6-3-2]

(a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the shotblaster (CCL1) shall not exceed 4.10 pounds per hour, when operating at a process weight rate of 1.0 ton of castings per hour.

(b) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the shotblaster (CCL2) exhausting to baghouse DC6 shall not exceed 8.56 pounds per hour, when operating at a process weight rate of 3.0 tons of castings per hour.

(c) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the seven (7) pedestal wheel grinders (GR1, GR2, GR5, GR6, GR7, GR8 and GR9) shall not exceed 1.62 pounds per hour, each, when operating at a process weight rate of 0.25 tons of castings per hour, each.

(d) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the two (2) dual wheel grinders (GR3 and GR4) shall not exceed 2.58 pounds per hour, each, when operating at a process weight rate of 0.5 ton of castings per hour, each.

(e) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the shotblaster (CCL3) shall not exceed 7.58 pounds per hour, when operating at a process weight rate of 2.5 tons of castings per hour.

The pounds per hour limitations were calculated using the following equations:

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

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

D.3.2 PSD Minor Limit [326 IAC 2-2]

Pursuant to T 169-9014-00019, issued on May 14, 2002, and as revised by this permit, the PM emissions at the seven (7) pedestal wheel grinders and two (2) dual wheel grinders shall not exceed 1.96 pounds per hour and the PM_{10} emissions shall not exceed 1.60 pounds per hour. This is equivalent to 8.59 tons of PM and 7.01 tons of PM_{10} per year from the total of the nine (9) grinders

These limitations, in combination with Condition D.2.2(b), shall limit the potential to emit PM and PM_{10} from the total of the seven (7) pedestal wheel grinders, identified as GR1, GR2, GR5, GR6, GR7, GR8, and GR9, two (2) dual wheel grinders, identified as GR3 and GR4, one (1) disamatic molding/ pouring line, and the one (1) mold making line, identified as part of DM1, all considered part of the same modification, to less than 25 tons per year, 15 tons per year, and 100 tons per year, respectively. Therefore, these limitations rendered the 1993/1994 modification a minor modification to an existing major source, and the requirements of 326 IAC 2-2, PSD, are not applicable.

D.3.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan is required for the seven (7) pedestal wheel grinders, identified as GR1, GR2, GR5, GR6, GR7, GR8, and GR9, two (2) dual wheel grinders, identified as GR3 and GR4, and their control devices. Section B - Preventative Maintenance Plan contains the Permittee's obligations with regard to the plan required by this condition.

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

D.3.4 Particulate Control [326 IAC 2-7-6(6)]

(a) In order to demonstrate compliance with Condition D.3.1, the baghouse (DC4) shall be in operation and control emissions from the shotblaster (CCL1) at all times when the shotblaster is in operation.

(b) In order to demonstrate compliance with Condition D.3.1, the baghouse (DC6) shall be in operation and control emissions from the shotblaster (CCL2) at all times when the shotblaster is in operation.

(c) In order to demonstrate compliance with Conditions D.3.1 and D.3.2, the baghouse (DC6) shall be in operation and control emissions from the seven (7) pedestal grinders at all times when the any of the seven (7) pedestal grinders are in operation.

(d) In order to demonstrate compliance with Conditions D.3.1 and D.3.2, the baghouse (DC6) shall be in operation and control emissions from the two (2) dual wheel grinders at all times when the either of the two (2) dual wheel grinders are in operation.

(e) In order to demonstrate compliance with Condition D.3.1, the baghouse (DC7) shall be in operation and control emissions from the shotblaster (CCL3) at all times when the shot-blaster is in operation.

(f) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

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

D.3.5 Visible Emissions Notations

(a) Visible emission notations of the seven (7) pedestal wheel grinders, identified as GR1, GR2, GR5, GR6, GR7, GR8, and GR9, two (2) dual wheel grinders, identified as GR3 and GR4, stack exhaust (R5) 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. Section C - Response to Excursions or Exceedances contains the Permittee's obligations with respect to reasonable response steps. Failure to take response steps contained in Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.3.6 Baghouse Parametric Monitoring [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

The Permittee shall record the pressure drop across the baghouse (DC6) used in conjunction with the seven (7) pedestal grinders (GR1, GR2, GR5, GR6, GR7, GR8 and GR9) and two (2) dual wheel grinders (GR3 and GR4), at least once per day when the grinding is in operation. When, for any one (1) reading, the pressure drop across the baghouse is outside the normal range of 3.0 and 7.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligations with respect to reasonable response steps. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps contained in 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 or replaced at least once every six (6) months.

D.3.7 Broken or Failed Bag Detection

(a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event

qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

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

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

D.3.8 Record Keeping Requirements

(a) To document the compliance status with Condition D.3.5, the Permittee shall maintain records of visible emission notations of the seven (7) pedestal wheel grinders, identified as GR1, GR2, GR5, GR6, GR7, GR8, and GR9, two (2) dual wheel grinders, identified as GR3 and GR4, stack exhaust 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 grinders did not operate that day).

(b) To document the compliance status with Condition D.3.6, the Permittee shall maintain records once per day of the pressure drop across the baghouse (DC6) used in conjunction with the seven (7) pedestal grinders (GR1, GR2, GR5, GR6, GR7, GR8 and GR9) and two (2) dual wheel grinders (GR3 and GR4). 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 grinders did not operate that day).

(c) Section C - General Record Keeping Requirements of this permit contains the Permittee's obligation with regard to the records required by this condition.

SECTION D.4 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Sand Handling, Core Making and Mold Making

(e) Sand handling, core making and molding making processes consisting of the following emission units and pollution control devices:

(1) The following mold making processes:

(A) One (1) mold sand handling system, constructed in 1965, identified as MSH, with a maximum capacity of 100 tons of sand per hour, consisting of the following:

(i) One (1) muller, constructed in 1987, with emissions controlled by baghouse DC3 and exhausting through stack S6 or returned inside through stack S6R;

(ii) Three (3) storage silos, constructed in 1960; and

(iii) Conveyors with emissions controlled by baghouse DC3 and exhausting through stack S6 or returned inside through stack S6R.

(B) Two (2) mold making lines, identified as DM1, one constructed in 1986 with a maximum capacity of 60 tons of sand per hour and one constructed in 1993 with a maximum capacity of 30 tons of sand per hour. Only sand, clay and water are used in the mold making operation.

(C) One (1) pallet molding operation, constructed in 1965, maximum capacity: 5 tons of sand per hour. Only sand, clay and water are used in the mold making operation.

(2) The following North isocure core making processes:

(A) One (1) core sand handling system, constructed in 1970, identified as CSH-North, with a maximum capacity of 10 tons of sand per hour, consisting of the following:

(i) One (1) storage silo, equipped with a bin vent filter; and

(ii) Two (2) surge hoppers, equipped with an after filter.

(B) One (1) isocure core machine, approved in 2010 for construction, identified as ICM-L10, maximum capacity: 1.5 ton of sand per hour, 24 pounds of resin per hour, and 2.1 pounds of catalyst (Dimethylethylamine) per hour, with catalyst emissions controlled by a voluntary fume scrubber, exhausting through stack S8.

(C) One (1) isocure core machine, permitted in 2011, identified as ICM-L10(II), maximum capacity: 1.5 ton of sand per hour, 24 pounds of resin per hour, and 2.1 pounds of catalyst (Dimethylethylamine) per hour, with catalyst emissions controlled by a voluntary fume scrubber, exhausting through stack S8.

(3) The following South isocure core making processes:

(A) One (1) core sand handling system, constructed in 2006, identified as CSH-South, with a maximum capacity of 1.5 tons of sand per hour, consisting of the following:

(i) One (1) storage silo, constructed in 2007, equipped with a bin vent filter; and

(ii) One (1) surge hopper.

(B) One (1) isocure core machine, constructed in 2006, identified as ICM-L20, with catalyst emissions controlled by a voluntary fume scrubber, exhausting to stack LA-1, maximum capacity: 1.5 tons of sand per hour, 24 pounds of resin per hour, and 2.1 pounds of non-HAP catalyst per hour.

(C) One (1) isocure core machine, approved in 2011 for construction, identified as ICM-L20(II), maximum capacity: 1.5 ton of sand per hour, 24 pounds of resin per hour, and 2.1 pounds of catalyst (Dimethylethylamine) per hour, with catalyst emissions controlled by a voluntary fume scrubber, exhausting through stack LA2.

(4) The following shell core making processes:

(A) One (1) bucket elevator for shell core sand, identified as SSH-North, constructed in 1981, equipped with a filter, maximum capacity: 2.0 tons of sand per hour.

(B) Ten (10) shell core making machines, seven (7) constructed in 1981 and three (3) constructed in 2005, identified as SCM, maximum capacity: 2.0 tons of pre-mixed sand per hour, each and total.

(5) One (1) air set core machine, constructed in 1997, identified as ACM, maximum capacity: 1.5 tons of sand, 3.91 pounds of alphaset and 1.30 pounds of alphacure per hour.

(6) One (1) 0.5 million British thermal unit per hour (MMBtu/hr) natural gas-fired core baking oven, constructed in 1970, identified as CM Oven, exhausting through two (2) stacks, identified as S7A and S7B.

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

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

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

(a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the mold sand handling operations (MSH), including the one (1) muller, exhausting to baghouse DC3, shall not exceed 51.3 pounds per hour, total, when operating at a process weight rate of 100 tons of sand per hour.

(b) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the core sand handling operations, identified as CSH-North, shall not exceed 8.07 pounds per hour, when operating at a process weight rate of 2.75 tons of sand per hour.

(c) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the sand handling operations at the one (1) isocure process, identified as CSH-South, shall not exceed 5.4 pounds per hour when operating at a process weight rate of 1.5 tons per hour.

(d) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the sand handling operations at the ten (10) shell core machines, identified as SSH-North, shall not exceed 6.5 pounds per hour when operating at a process weight rate of 2.0 tons per hour.

(e) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the sand handling operations at the one (1) core baking oven (CM Oven) shall not exceed 19.2 pounds per hour, when operating at a process weight rate of ten (10) tons per hour.

(f) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the isocure core machines, identified as ICM-L10, ICM-L10(II), ICM-L20 and ICM-L20(II) shall each not exceed 5.4 pounds per hour each, when operating at a process weight rate of 1.5 tons of sand per hour for each core machine.

The pounds per hour limitations were calculated using the following equations:

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

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

or

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

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

D.4.2 PSD Minor Limit [326 IAC 2-2]

Pursuant to T 169-9014-00019, issued on May 14, 2002, the emissions from the mold sand handling operations (MSH), including the one (1) muller shall be less than 5.71 pounds of PM per hour and 3.42 pounds of PM_{10} per hour. Therefore, the potential to emit PM is limited to less than 25 tons per year and the potential to emit PM_{10} is limited to less than 15 tons per year from the addition of the one (1) muller, rendering the 1987 modification a minor modification to an existing major source, and the requirements of 326 IAC 2-2, PSD, not applicable to the 1987 modification.

D.4.3 PSD Minor Limit [326 IAC 2-2]

(a) Pursuant to Significant Source Modification No. 169-28742-00019, Significant Source Modification No. 169-23066-00019, and in order to render the requirements of 326 IAC 2-2 not applicable, the Permittee shall comply with the following:

(1) The sand throughput to the one (1) core sand handling system, identified as CSH-South, and one (1) isocure core machine, identified as ICM-L20, shall be less than 9,090 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

(2) The PM emissions shall not exceed the pound per ton limits below:

Emission Unit	PM Emission Limit (lb/ton)
CSH-South	3.60
ICM-L20	1.10

Compliance with the sand throughput limit combined with the PM pound per ton limit restricts the PM emissions from the modification to less than twenty-five (25) tons per twelve (12) consecutive month period and renders the requirements of 326 IAC 2-2 not applicable.

D.4.4 PSD Minor Limit [326 IAC 2-2]

The following conditions shall apply to the isocure core machines, identified as ICM-L10, ICM-L10(II) and ICM-L20(II):

(a) The resin usage for the isocure core machines ICM-L10, ICM-L10(II) and ICM-L20(II) shall be less than 149,629 pounds of resin per twelve (12) consecutive month period, with compliance determined at the end of each month, and the total catalyst usage shall each not exceed 13,200 pounds per twelve (12) consecutive month period, with compliance determined at the end of each month.

(b) The VOC emissions (not including catalyst) from the isocure core machines, identified as ICM-L10, ICM-L10(II) and ICM-L20(II) shall each not exceed 0.09 pound per pound of resin.

(c) The total sand throughput to the three isocure core machines, identified as ICM-L10, ICM-L10(II), ICM-L20(II), shall be less than 27,270 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

(d) The PM_{10} emissions shall not exceed the pound per ton limits below:

Emission Unit	PM_{10} Emission Limit (lb/ton)
ICM-L10	1.10
ICM-L10(II)	1.10
ICM-L20(II)	1.10

Compliance with these limits restricts the VOC to less than forty (40) tons per twelve (12) consecutive month period and PM_{10} to less than fifteen (15) tons per twelve (12) consecutive month period and renders the requirements of 326 IAC 2-2 not applicable to 169-28742-00019 and SSM 169-30337-00019.

D.4.5 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

(a) Pursuant to Significant Source Modification No. 169-28742-00019, in order to render the requirements of 326 IAC 8-1-6 (New facilities; General reduction requirements) not applicable, the following conditions shall apply to the one (1) isocure core machine, identified as ICM-L10, approved in 2010 for construction:

(1) The resin usage for the isocure core machine shall be less than 266,666 pounds of resin per twelve (12) consecutive month period with compliance determined at the end of each month.

(2) Total DMEA usage for the isocure process shall be less than 26,000 pounds of DMEA per twelve (12) consecutive month period, with compliance determined at the end of each month.

(3) The VOC emissions (not including catalyst) from the isocure core machine shall be less than 0.09 pound per pound of resin before controls.

Compliance with these limits will limit the potential VOC emissions from the isocure core machine to less than 25 tons per 12 consecutive month period and render the requirements of 326 IAC 8-1-6 not applicable.

(b) Pursuant to Significant Permit Modification 169-23221-00019, issued on November 22, 2006, in order to render the requirements of 326 IAC 8-1-6 (New facilities; General reduction requirements) not applicable, the following conditions shall apply to the one (1) isocure core machine, identified as ICM-L20:

(1) The resin usage for the isocure core machine shall be less than 331,128 pounds of resin per twelve (12) consecutive month period, with compliance determined at the end of each month, and the total catalyst usage shall not exceed 33,113 pounds per twelve (12) consecutive month period, with compliance determined at the end of each month.

(2) The VOC emissions (not including catalyst) from the isocure core machine shall be less than 0.05 pound per pound of resin before controls.

(c) In order to render the requirements of 326 IAC 8-1-6 (New facilities; General reduction requirements) not applicable, the following conditions shall apply to the two isocure core machines, identified as ICM-L10(II) and ICM-L20(II):

(1) The resin usage for each isocure core machine shall be less than266,666 pounds of resin per twelve (12) consecutive month period, with compliance determined at the end of each month, and the total catalyst usage shall not exceed 26,000 pounds per twelve (12) consecutive month period, with compliance determined at the end of each month.

(2) The VOC emissions (not including catalyst) from each isocure core machine shall be less than0.09 pound per pound of resin.

D.4.6 HAPs Limit

The annual usage of the ten (10) shell core machines, identified as SCM, shall be limited to 750,000 lbs of Index Material for the shell binder system per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with this limit, along with the other source HAPs, will limit the total HAPs emissions from the source to less than 25 tons per 12 consecutive month period and render the source an Area Source of HAPs.

D.4.7 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan is required for these facilities and any control devices. Section B - Preventative Maintenance Plan contains the Permittee's obligation with regard to the preventative maintenance plan required by this condition.

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

D.4.8 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

In order to demonstrate compliance with Condition D.4.1(a) and D.4.2(a), the Permittee shall perform PM and PM_{10} testing for the mold sand handling operations (MSH), exhausting to baghouse DC3, utilizing methods as approved by the Commissioner at least once every five (5) years from the date of the most recent valid compliance demonstration. PM_{10} includes filterable and condensible PM_{10}. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

D.4.9 Particulate Control [326 IAC 2-7-6(6)]

(a) In order to demonstrate compliance with Conditions D.4.1(a) and D.4.2(a), the baghouse (DC3) shall be in operation and control emissions from the mold sand handling operations, identified as MSH, at all times when the mold sand handling is in operation.

(b) In order to demonstrate compliance with Condition D.4.1(b), the filters shall be in place and control emissions from the core sand handling operations, identified as CSH-North, at all

times when the core sand handling is in operation.

(c) In order to demonstrate compliance with Condition D.4.1(d), the filter shall be in place and control emissions from the sand handling operations at the ten (10) shell core machines, identified as SSH-North, at all times when the shell core sand handling is in operation.

(d) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

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

D.4.10 Visible Emissions Notations [40 CFR 64]

(a) Visible emission notations of the mold sand handling (MSH), stack exhaust (S6 and S6R), 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. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.4.11 Baghouse Parametric Monitoring [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)] [40 CFR 64]

The Permittee shall record the pressure drop across the baghouse (DC3) used in conjunction with the mold sand handling operations (MSH), at least once per day when the when the sand handling is in operation. When, for any one (1) reading, the pressure drop across the baghouse is outside the normal range of 3.0 and 7.2 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps 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 or replaced at least once every six (6) months.

D.4.12 Broken or Failed Bag or Filter Detection

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

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

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

D.4.13 Record Keeping Requirements

(a) To document the compliance status with Condition D.4.2, D.4.3, and D.4.4 the Permittee shall maintain records of the quantity of sand processed each month by the core sand handling systems.

(b) To document the compliance status with Condition D.4.4 and D.4.5, the Permittee shall maintain records of the catalyst and resin usage at each of the isocure core machines, identified as ICM-L10, ICM-L10(II), ICM-L20 and ICM-L20(II), for each month.

(c) To document the compliance status with Condition D.4.5, the Permittee shall maintain records of the VOC content of binders used at each of the isocure core machines each month.

(d) Pursuant to Significant Permit Modification 169-23221-00019, issued on November 22, 2006, the Permittee shall calculate and maintain a record of the annual emissions from the one (1) scrap handling process, identified as process SI; one (1) melting and casting process, including CP, IF1, IF2, IF3, IF-4, LH1, LH2, LH3, LH4, and all of operation MP; one (1) shakeout operation, identified as operation CCS; one (1) cleaning and finishing process, including CCL1, CCL2, CCL3, GR1, GR2, GR3, GR4, GR5, GR6, GR7, GR8, GR9, and HT1; one (1) sand handling process, including MSH, CSH-North, and SSH-North; one (1) core baking oven, identified as CM Oven; ten (10) shell core machines, identified as SCM; one (1) air set core machine, identified as ACM; and the inoculation operations, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the installation of L-20.

(e) To document the compliance status with Condition D.4.10, the Permittee shall maintain records of visible emission notations of the mold sand handling (MSH), stack exhaust 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 mold sand handling did not operate that day).

(f) To document the compliance status with Condition D.4.11, the Permittee shall maintain records once per day of the pressure drop across the baghouse (DC3) used in conjunction with the mold sand handling (MSH). 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 mold sand handling did not operate that day).

(g) Section C - General Record Keeping Requirements of this permit contains the Permittee's obligation with regard to the records required by this condition.

D.4.14 Reporting Requirements

A quarterly summary of the information to document the compliance with Conditions D.4.2, D.4.3, D.4.4 and D.4.5 shall be submitted, using the reporting forms located at the end of this permit, or their equivalent, not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a “responsible official” as defined by 326 IAC 2-7-1(34).

SECTION D.5 FACILITY CONDITIONS

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

(f) Inoculation operations, operating since approximately 1973, exhausting inside the building, with some emissions voluntarily controlled by the general ventilation baghouse DC1, and exiting through the general building exhaust and at stack S1, maximum capacity: 10 tons of metal per hour.

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

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

D.5.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the inoculation shall not exceed 19.2 pounds per hour, when operating at a process weight rate of 10 tons of metal per hour. The pounds per hour limitation was calculated using 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:

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

D.5.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan is required for this facility. Section B - Preventative Maintenance Plan contains the Permittee's obligation with regard to the preventative maintenance plan required by this condition.

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

D.5.3 Visible Emissions Notations

(a) Visible emission notations of the inoculation stack exhausts (general ventilation and stack S1) 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. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this permit. Failure to take response steps shall be considered a deviation from this permit.

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

D.5.4 Record Keeping Requirements

(a) To document the compliance status with Condition D.5.3, the Permittee shall maintain records of visible emission notations of the inoculation stack exhausts 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 inoculation did not operate that day).

(b) Section C - General Record Keeping Requirements of this permit contains the Permittee's obligation with regard to the records required by this condition.

SECTION D.6 FACILITY OPERATION CONDITIONS

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

Degreasing operations that do not exceed 145 gallons per 12 month period, except if subject to 326 IAC 20-6, including one (1) parts washer, constructed in 1987, equipped with a lid. There are no HAPs or halogenated solvents used in the degreasing operations. [326 IAC 8-3-2]

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

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

D.6.1 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

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

(a) Equip the cleaner with a cover;

(b) Equip the cleaner with a facility for draining cleaned parts;

(c) Close the degreaser cover whenever parts are not being handled in the cleaner;

(d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;

(e) Provide a permanent, conspicuous label summarizing the operation requirements;

(f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

SECTION E.1 EMISSIONS UNIT OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Facilities Subject to 40 CFR 63, Subpart ZZZZZ

(2) Three (3) electric induction (scrap iron) furnaces, constructed in 1973 and modified in 1995, identified as IF1, IF2, and IF3, exhausting inside the building, with some emissions voluntarily controlled by the general ventilation baghouse DC1, and exiting through the general building exhaust and at stack S1, maximum charge rate: 3.6 tons per hour, each, and 6.5 tons of iron per hour, total.

(3) One (1) electric induction (stainless steel) furnace, constructed in 1966, identified as IF4, maximum charge rate: 1.0 ton per hour.

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

National Emissions Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-7-5(1)]

E.1.1 General Provisions Relating to Hazardous Air Pollutants [326 IAC 20-1][40 CFR Part 63, Subpart A]

The provisions of 40 CFR Part 63 Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1, apply to the facilities described in this section except when otherwise specified in 40 CFR Part 63, Subpart ZZZZZ.

E.1.2 National Emission Standards for Hazardous Air Pollutants for Source Category: Iron and Steel Foundries [326 IAC 20-1][40 CFR Part 63, Subpart ZZZZZ]

The provisions of 40 CFR 63, Subpart ZZZZZ - National Emission Standards for Hazardous Air Pollutants for Source Category: Iron and Steel Foundries, which are incorporated by reference as 326 IAC 20-1, apply to the electric induction furnaces at this source.

The electric induction furnaces, identified as IF1, IF2, IF3 and IF4, are subject to the following portions of Subpart ZZZZZ, which is included as Attachment A of this permit.

(1) 40 CFR 63.10880 (a), (b)(1), (c), (f)
(2) 40 CFR 63.10881 (a)(1)
(3) 40 CFR 63.10885 (a)(1), (a)(2)(i)
(4) 40 CFR 63.10890 (a), (b), (c)(1), (d), (e), (f), (i)
(5) 40 CFR 63.10895 (c), (e)
(6) 40 CFR 63.10896
(7) 40 CFR 63.10897 (a)(1), (d), (e), (f), (g)
(8) 40 CFR 63.10899
(9) 40 CFR 63.10905
(10) 40 CFR 63.10906

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

PART 70 OPERATING PERMIT
CERTIFICATION

Source Name: Manchester Metals, LLC
Source Address: 205 Wabash Road, North Manchester, Indiana 46962
Part 70 Permit No.: T 169-23344-00019

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

Please check what document is being certified:

☐ Annual Compliance Certification Letter

☐ Test Result (specify) _____

☐ Report (specify) _____

☐ Notification (specify) _____

☐ Affidavit (specify) _____

☐ Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
Signature:
Printed Name:
Title/Position:
Phone:
Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
100 North Senate Avenue
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: Manchester Metals, LLC
Source Address: 205 Wabash Road, North Manchester, Indiana 46962
Part 70 Permit No.: T 169-23344-00019

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

☐ This is an emergency as defined in 326 IAC 2-7-1(12)
- ☐ The Permittee must notify the Office of Air Quality (OAQ), within four (**4**) business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and
- ☐ The Permittee must submit notice in writing or by facsimile within two (**2**) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16.

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

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

If any of the following are not applicable, mark N/A **Page 2 of 2**

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO_2, VOC, NO_X, CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

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

Part 70 Quarterly Report

Source Name: Manchester Metals, LLC
Source Address: 205 Wabash Road, North Manchester, Indiana 46962
Part 70 Permit No.: T 169-23344-00019
Facilities: Pouring and cooling at the one (1) disaforma molding/pouring line
Parameter: Throughput of metal
Limit: Less than 11,826 tons per consecutive twelve (12) month period with compliance determined at the end of each month.

QUARTER : _____ YEAR: _____

Month	Metal Throughput (tons)	Metal Throughput (tons)	Metal Throughput (tons)
	This Month	Previous 11 Months	12 Month Total

☐ No deviation occurred in this quarter.

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

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

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

Part 70 Quarterly Report

Source Name: Manchester Metals, LLC
Source Address: 205 Wabash Road, North Manchester, Indiana 46962
Part 70 Permit No.: T 169-23344-00019
Facilities: Pouring and cooling at the one (1) disamatic molding/pouring line
Parameter: Throughput of metal
Limit: Less than 4,613 tons per consecutive twelve (12) month period with compliance determined at the end of each month.

QUARTER : _____ YEAR: _____

Month	Metal Throughput (tons)	Metal Throughput (tons)	Metal Throughput (tons)
	This Month	Previous 11 Months	12 Month Total

☐ No deviation occurred in this quarter.

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

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

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

Part 70 Quarterly Report

Source Name: Manchester Metals, LLC
Source Address: 205 Wabash Road, North Manchester, Indiana 46962
Part 70 Permit No.: T 169-23344-00019
Facilities: Four (4) electric induction furnaces, IF1 through IF4
Parameter: Iron throughput
Limit: Less than 34,700 tons per consecutive twelve (12) month period, with compliance determined at the end of each month. Each ton of steel melted shall be considered equivalent to one tenth (0.1) ton of iron throughput.

QUARTER : _____ YEAR: _____

Month	Iron Throughput (tons)	Iron Throughput (tons)	Iron Throughput (tons)
	This Month	Previous 11 Months	12 Month Total

☐ No deviation occurred in this quarter.

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

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

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

Part 70 Quarterly Report

Source Name: Manchester Metals, LLC
Source Address: 205 Wabash Road, North Manchester, Indiana 46962
Part 70 Permit No.: T 169-23344-00019
Facility: One (1) core sand handling system, identified as CSH-South
Parameter: Sand throughput
Limit: Less than 9,090 tons of sand per twelve (12) consecutive month period, with compliance determined at the end of each month.

QUARTER : _____ YEAR: _____

Month	Sand Throughput (tons)	Sand Throughput (tons)	Sand Throughput (tons)
	This Month	Previous 11 Months	12 Month Total

☐ No deviation occurred in this quarter.

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

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

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

Part 70 Quarterly Report

Source Name: Manchester Metals, LLC
Source Address: 205 Wabash Road, North Manchester, Indiana 46962
Part 70 Permit No.: T 169-23344-00019
Facility: One (1) core sand handling system, identified as ICM-L20
Parameter: Sand throughput
Limit: Less than 9,090 tons of sand per twelve (12) consecutive month period, with compliance determined at the end of each month.

QUARTER : _____ YEAR: _____

Month	Sand Usage (tons)	Sand Usage (tons)	Sand Usage (tons)
	This Month	Previous 11 Months	12 Month Total

☐ No deviation occurred in this quarter.

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

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

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

Part 70 Quarterly Report

Source Name: Manchester Metals, LLC
Source Address: 205 Wabash Road, North Manchester, Indiana 46962
Part 70 Permit No.: T 169-23344-00019
Facility: Isocure core machines, identified as ICM-L10, ICM-L10(II) & ICM-L20(II)
Parameter: Sand throughput
Limit: Less than 27,270 tons of sand per twelve (12) consecutive month period, with compliance determined at the end of each month.

QUARTER : _____ YEAR: _____

Month	Sand Usage (tons)			Sand Usage (tons)			Sand Usage (tons)
	This Month			Previous 11 Months			12 Month Total
	ICM-L10	ICM-L10(II)	ICM-L20(II)	ICM-L10	ICM-L10(II)	ICM-L20(II)	

☐ No deviation occurred in this quarter.

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

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

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

Part 70 Quarterly Report

Source Name: Manchester Metals, LLC
Source Address: 205 Wabash Road, North Manchester, Indiana 46962
Part 70 Permit No.: T 169-23344-00019
Facility: One (1) isocure core machine, identified as ICM-L10
Parameter: Resin usage
Limit: Less than 149,629 pounds per consecutive twelve (12) month period, with compliance determined at the end of each month.

QUARTER : _____ YEAR: _____

Month	Resin Usage (lbs)	Resin Usage (lbs)	Resin Usage (lbs)
	This Month	Previous 11 Months	12 Month Total

☐ No deviation occurred in this quarter.

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

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

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

Part 70 Quarterly Report

Source Name: Manchester Metals, LLC
Source Address: 205 Wabash Road, North Manchester, Indiana 46962
Part 70 Permit No.: T 169-23344-00019
Facility: One (1) isocure core machine, identified as ICM-L10
Parameter: Catalyst usage
Limit: Less than 33,000 pounds per consecutive twelve (12) month period, with compliance determined at the end of each month.

QUARTER : _____ YEAR: _____

Month	Catalyst Usage (lbs)	Catalyst Usage (lbs)	Catalyst Usage (lbs)
	This Month	Previous 11 Months	12 Month Total

☐ No deviation occurred in this quarter.

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

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

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

Part 70 Quarterly Report

Source Name: Manchester Metals, LLC
Source Address: 205 Wabash Road, North Manchester, Indiana 46962
Part 70 Permit No.: T 169-23344-00019
Facility: One (1) isocure core machine, identified as ICM-L10(II)
Parameter: Resin usage
Limit: Less than 149,629 pounds per consecutive twelve (12) month period, with compliance determined at the end of each month.

QUARTER : _____ YEAR: _____

Month	Resin Usage (lbs)	Resin Usage (lbs)	Resin Usage (lbs)
	This Month	Previous 11 Months	12 Month Total

☐ No deviation occurred in this quarter.

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

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

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

Part 70 Quarterly Report

Source Name: Manchester Metals, LLC
Source Address: 205 Wabash Road, North Manchester, Indiana 46962
Part 70 Permit No.: T 169-23344-00019
Facility: One (1) isocure core machine, identified as ICM-L10(II)
Parameter: Catalyst usage
Limit: Less than 13,200 pounds per consecutive twelve (12) month period, with compliance determined at the end of each month.

QUARTER : _____ YEAR: _____

Month	Catalyst Usage (lbs)	Catalyst Usage (lbs)	Catalyst Usage (lbs)
	This Month	Previous 11 Months	12 Month Total

☐ No deviation occurred in this quarter.

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

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone:

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

Part 70 Quarterly Report

Source Name: Manchester Metals, LLC
Source Address: 205 Wabash Road, North Manchester, Indiana 46962
Part 70 Permit No.: T 169-23344-00019
Facility: One (1) isocure core machine, identified as ICM-L20(II)
Parameter: Resin usage
Limit: Less than 149,629 pounds per consecutive twelve (12) month period, with compliance determined at the end of each month.

QUARTER : _____ YEAR: _____

Month	Resin Usage (lbs)	Resin Usage (lbs)	Resin Usage (lbs)
	This Month	Previous 11 Months	12 Month Total

☐ No deviation occurred in this quarter.

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

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

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

Part 70 Quarterly Report

Source Name: Manchester Metals, LLC
Source Address: 205 Wabash Road, North Manchester, Indiana 46962
Part 70 Permit No.: T 169-23344-00019
Facility: One (1) isocure core machine, identified as ICM-L20(II)
Parameter: Catalyst usage
Limit: Less than 13,200 pounds per consecutive twelve (12) month period, with compliance determined at the end of each month.

QUARTER : _____ YEAR: _____

Month	Catalyst Usage (lbs)	Catalyst Usage (lbs)	Catalyst Usage (lbs)
	This Month	Previous 11 Months	12 Month Total

☐ No deviation occurred in this quarter.

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

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

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

PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Manchester Metals, LLC
Source Address: 205 Wabash Road, North Manchester, Indiana 46962
Part 70 Permit No.: T 169-23344-00019

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

This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements of this permit, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

☐ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

☐ THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

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

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

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

Form Completed By: _____

Title/Position: _____

Date: _____

Phone: _____

Attachment A – National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Area Sources [40 CFR 63, Subpart ZZZZZ]

Source Description and Location	
Source Name:	Manchester Metals, LLC
Source Location:	205 Wabash Rd, North Manchester, Indiana 46962
County:	Wabash

NESHAP [40 CFR 63, Subpart ZZZZZ**]**

Title 40: Protection of Environment
PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES

Subpart ZZZZZ—National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Area Sources

Source: 73 FR 252, Jan. 2, 2008, unless otherwise noted.

Applicability and Compliance Dates

§ 63.10880 Am I subject to this subpart?

(a) You are subject to this subpart if you own or operate an iron and steel foundry that is an area source of hazardous air pollutant (HAP) emissions.

(b) This subpart applies to each new or existing affected source. The affected source is each iron and steel foundry.

(1) An affected source is existing if you commenced construction or reconstruction of the affected source before September 17, 2007.

(2) An affected source is new if you commenced construction or reconstruction of the affected source on or after September 17, 2007. If an affected source is not new pursuant to the preceding sentence, it is not new as a result of a change in its compliance obligations pursuant to §63.10881(d).

(c) On and after January 2, 2008, if your iron and steel foundry becomes a major source as defined in §63.2, you must meet the requirements of 40 CFR part 63, subpart EEEEE.

(d) This subpart does not apply to research and development facilities, as defined in section 112(c)(7) of the Clean Air Act.

(e) You are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71, provided you are not otherwise required by law to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a). Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart.

(f) If you own or operate an existing affected source, you must determine the initial applicability of the requirements of this subpart to a small foundry or a large foundry based on your facility's metal melt production for calendar year 2008. If the metal melt production for calendar year 2008 is 20,000 tons or less, your area source is a small foundry. If your metal melt production for calendar year 2008 is greater than 20,000 tons, your area source is a large foundry. You must submit a written notification to the Administrator that identifies your area source as a small foundry or a large foundry no later than January 2, 2009.

(g) If you own or operate a new affected source, you must determine the initial applicability of the requirements of this subpart to a small foundry or a large foundry based on your facility's annual metal melting capacity at startup. If the annual metal melting capacity is 10,000 tons or less, your area source is a small foundry. If the annual metal melting capacity is greater than 10,000 tons, your area source is a large foundry. You must submit a written notification to the Administrator that identifies your area source as a small foundry or a large foundry no later than 120 days after startup.

§ 63.10881 What are my compliance dates?

(a) If you own or operate an existing affected source, you must achieve compliance with the applicable provisions of this subpart by the dates in paragraphs (a)(1) through (3) of this section.

(1) Not later than January 2, 2009 for the pollution prevention management practices for metallic scrap in §63.10885(a) and binder formulations in §63.10886.

(2) Not later than January 4, 2010 for the pollution prevention management practices for mercury in §63.10885(b).

(3) Except as provided in paragraph (d) of this section, not later than 2 years after the date of your large foundry's notification of the initial determination required in §63.10880(f) for the standards and management practices in §63.10895.

(b) If you have a new affected source for which the initial startup date is on or before January 2, 2008, you must achieve compliance with the provisions of this subpart not later than January 2, 2008.

(c) If you own or operate a new affected source for which the initial startup date is after January 2, 2008, you must achieve compliance with the provisions of this subpart upon startup of your affected source.

(d) Following the initial determination for an existing affected source required in §63.10880(f),

(1) Beginning January 1, 2010, if the annual metal melt production of your small foundry exceeds 20,000 tons during the preceding calendar year, you must submit a notification of foundry reclassification to the Administrator within 30 days and comply with the requirements in paragraphs (d)(1)(i) or (ii) of this section, as applicable.

(i) If your small foundry has never been classified as a large foundry, you must comply with the requirements for a large foundry no later than 2 years after the date of your foundry's notification that the annual metal melt production exceeded 20,000 tons.

(ii) If your small foundry had previously been classified as a large foundry, you must comply with the requirements for a large foundry no later than the date of your foundry's most recent notification that the annual metal melt production exceeded 20,000 tons.

(2) If your facility is initially classified as a large foundry (or your small foundry subsequently becomes a large foundry), you must comply with the requirements for a large foundry for at least 3 years before reclassifying your facility as a small foundry, even if your annual metal melt production falls below 20,000 tons. After 3 years, you may reclassify your facility as a small foundry provided your annual metal melt production for the preceding calendar year was 20,000 tons or less. If you reclassify your large foundry as a small foundry, you must submit a notification of reclassification to the Administrator within 30 days and comply with the requirements for a small foundry no later than the date you notify the Administrator of the reclassification. If the annual metal melt production exceeds 20,000 tons during a subsequent year, you must submit a notification of reclassification to the Administrator within 30 days and comply with the requirements for a large foundry no later than the date you notify the Administrator of the reclassification.

(e) Following the initial determination for a new affected source required in §63.10880(g),

(1) If you increase the annual metal melt capacity of your small foundry to exceed 10,000 tons, you must submit a notification of reclassification to the Administrator within 30 days and comply with the requirements for a large foundry no later than the startup date for the new equipment, if applicable, or the date of issuance for your revised State or Federal operating permit.

(2) If your facility is initially classified as a large foundry (or your small foundry subsequently becomes a large foundry), you must comply with the requirements for a large foundry for at least 3 years before reclassifying your facility as a small foundry. After 3 years, you may reclassify your facility as a small foundry provided your most recent annual metal melt capacity is 10,000 tons or less. If you reclassify your large foundry as a small foundry, you must notify the Administrator within 30 days and comply with the requirements for a small foundry no later than the date your melting equipment was removed or taken out of service, if applicable, or the date of issuance for your revised State or Federal operating permit.

Pollution Prevention Management Practices for New and Existing Affected Sources

§ 63.10885 What are my management practices for metallic scrap and mercury switches?

(a) *Metallic scrap management program.* For each segregated metallic scrap storage area, bin or pile, you must comply with the materials acquisition requirements in paragraph (a)(1) or (2) of this section. You must keep a copy of the material specifications onsite and readily available to all personnel with material acquisition duties, and provide a copy to each of your scrap providers. You may have certain scrap subject to paragraph (a)(1) of this section and other scrap subject to paragraph (a)(2) of this section at your facility provided the metallic scrap remains segregated until charge make-up.

(1) *Restricted metallic scrap.* You must prepare and operate at all times according to written material specifications for the purchase and use of only metal ingots, pig iron, slitter, or other materials that do not include post-consumer automotive body scrap, post-consumer engine blocks, post-consumer oil filters, oily turnings, lead components, chlorinated plastics, or free liquids. For the purpose of this subpart, “free liquids” is defined as material that fails the paint filter test by EPA Method 9095B, “Paint Filter Liquids Test” (revision 2), November 2004 (incorporated by reference—see §63.14). The requirements for no free liquids do not apply if the owner or operator can demonstrate that the free liquid is water that resulted from scrap exposure to rain.

(2) *General iron and steel scrap.* You must prepare and operate at all times according to written material specifications for the purchase and use of only iron and steel scrap that has been depleted (to the extent practicable) of organics and HAP metals in the charge materials used by the iron and steel foundry. The materials specifications must include at minimum the information specified in paragraph (a)(2)(i) or (ii) of this section.

(i) Except as provided in paragraph (a)(2)(ii) of this section, specifications for metallic scrap materials charged to a scrap preheater or metal melting furnace to be depleted (to the extent practicable) of the presence of used oil filters, chlorinated plastic parts, accessible lead-containing components (such as batteries and wheel weights), and a program to ensure the scrap materials are drained of free liquids.

(ii) For scrap charged to a cupola metal melting furnace that is equipped with an afterburner, specifications for metallic scrap materials to be depleted (to the extent practicable) of the presence of chlorinated plastics, accessible lead-containing components (such as batteries and wheel weights), and a program to ensure the scrap materials are drained of free liquids.

(b) *Mercury requirements.* For scrap containing motor vehicle scrap, you must procure the scrap pursuant to one of the compliance options in paragraphs (b)(1), (2), or (3) of this section for each scrap provider, contract, or shipment. For scrap that does not contain motor vehicle scrap, you must procure the scrap pursuant to the requirements in paragraph (b)(4) of this section for each scrap provider, contract, or shipment. You may have one scrap provider, contract, or shipment subject to one compliance provision and others subject to another compliance provision.

(1) *Site-specific plan for mercury switches.* You must comply with the requirements in paragraphs (b)(1)(i) through (v) of this section.

(i) You must include a requirement in your scrap specifications for removal of mercury switches from vehicle bodies used to make the scrap.

(ii) You must prepare and operate according to a plan demonstrating how your facility will implement the scrap specification in paragraph (b)(1)(i) of this section for removal of mercury switches. You must submit the plan to the Administrator for approval. You must operate according to the plan as submitted during the review and approval process, operate according to the approved plan at all times after approval, and address any deficiency identified by the Administrator or delegated authority within 60 days following disapproval of a plan. You may request approval to revise the plan and may operate according to the revised plan unless and until the revision is disapproved by the Administrator or delegated authority. The Administrator or delegated authority may change the approval status of the plan upon 90-days written notice based upon the semiannual report or other information. The plan must include:

(A) A means of communicating to scrap purchasers and scrap providers the need to obtain or provide motor vehicle scrap from which mercury switches have been removed and the need to ensure the proper management of the mercury switches removed from the scrap as required under the rules implementing subtitle C of the Resource Conservation and Recovery Act (RCRA) (40 CFR parts 261 through 265 and 268). The plan must include documentation of direction to appropriate staff to communicate to suppliers throughout the scrap supply chain the need to promote the removal of mercury switches from end-of-life vehicles. Upon the request of the Administrator or delegated authority, you must provide examples of materials that are used for outreach to suppliers, such as letters, contract language, policies for purchasing agents, and scrap inspection protocols;

(B) Provisions for obtaining assurance from scrap providers motor vehicle scrap provided to the facility meet the scrap specification;

(C) Provisions for periodic inspections or other means of corroboration to ensure that scrap providers and dismantlers are implementing appropriate steps to minimize the presence of mercury switches in motor vehicle scrap and that the mercury switches removed are being properly managed, including the minimum frequency such means of corroboration will be implemented; and

(D) Provisions for taking corrective actions (i.e., actions resulting in scrap providers removing a higher percentage of mercury switches or other mercury-containing components) if needed, based on the results of procedures implemented in paragraph (b)(1)(ii)(C) of this section).

(iii) You must require each motor vehicle scrap provider to provide an estimate of the number of mercury switches removed from motor vehicle scrap sent to the facility during the previous year and the basis for the estimate. The Administrator may request documentation or additional information at any time.

(iv) You must establish a goal for each scrap supplier to remove at least 80 percent of the mercury switches. Although a site-specific plan approved under paragraph (b)(1) of this section may require only the removal of convenience light switch mechanisms, the Administrator will credit all documented and verifiable mercury-containing components removed from motor vehicle scrap (such as sensors in anti-locking brake systems, security systems, active ride control, and other applications) when evaluating progress towards the 80 percent goal.

(v) For each scrap provider, you must submit semiannual progress reports to the Administrator that provide the number of mercury switches removed or the weight of mercury recovered from the switches, the estimated number of vehicles processed, an estimate of the percent of mercury switches removed, and certification that the removed mercury switches were recycled at RCRA-permitted facilities or otherwise properly managed pursuant to RCRA subtitle C regulations referenced in paragraph (b)(1)(ii)(A) of this section. This information can be submitted in aggregate form and does not have to be submitted for each shipment. The Administrator may change the approval status of a site-specific plan following 90-days notice based on the progress reports or other information.

(2) *Option for approved mercury programs.* You must certify in your notification of compliance status that you participate in and purchase motor vehicle scrap only from scrap providers who participate in a program for removal of mercury switches that has been approved by the Administrator based on the criteria in paragraphs (b)(2)(i) through (iii) of this section. If you purchase motor vehicle scrap from a broker, you must certify that all scrap received from that broker was obtained from other scrap providers who participate in a program for the removal of mercury switches that has been approved by the Administrator based on the criteria in paragraphs (b)(2)(i) through (iii) of this section. The National Mercury Switch Recovery Program and the State of Maine Mercury Switch Removal Program are EPA-approved programs under paragraph (b)(2) of this section unless and until the Administrator disapproves the program (in part or in whole) under paragraph (b)(2)(iii) of this section.

(i) The program includes outreach that informs the dismantlers of the need for removal of mercury switches and provides training and guidance for removing mercury switches;

(ii) The program has a goal to remove at least 80 percent of mercury switches from motor vehicle scrap the scrap provider processes. Although a program approved under paragraph (b)(2) of this section may require only the removal of convenience light switch mechanisms, the Administrator will credit all documented and verifiable mercury-containing components removed from motor vehicle scrap (such as sensors in anti-locking brake systems, security systems, active ride control, and other applications) when evaluating progress towards the 80 percent goal; and

(iii) The program sponsor agrees to submit progress reports to the Administrator no less frequently than once every year that provide the number of mercury switches removed or the weight of mercury recovered from the switches, the estimated number of vehicles processed, an estimate of the percent of mercury switches recovered, and certification that the recovered mercury switches were recycled at facilities with permits as required under the rules implementing subtitle C of RCRA (40 CFR parts 261 through 265 and 268). The progress reports must be based on a database that includes data for each program participant; however, data may be aggregated at the State level for progress reports that will be publicly available. The Administrator may change the approval status of a program or portion of a program (e.g., at the State level) following 90-days notice based on the progress reports or on other information.

(iv) You must develop and maintain onsite a plan demonstrating the manner through which your facility is participating in the EPA-approved program.

(A) The plan must include facility-specific implementation elements, corporate-wide policies, and/or efforts coordinated by a trade association as appropriate for each facility.

(B) You must provide in the plan documentation of direction to appropriate staff to communicate to suppliers throughout the scrap supply chain the need to promote the removal or mercury switches from end-of-life vehicles. Upon the request of the Administrator or delegated authority, you must provide examples of materials that are used for outreach to suppliers, such as letters, contract language, policies for purchasing agents, and scrap inspection protocols.

(C) You must conduct periodic inspections or other means of corroboration to ensure that scrap providers are aware of the need for and are implementing appropriate steps to minimize the presence of mercury in scrap from end-of-life vehicles.

(3) *Option for specialty metal scrap.* You must certify in your notification of compliance status and maintain records of documentation that the only materials from motor vehicles in the scrap are materials recovered for their specialty alloy (including, but not limited to, chromium, nickel, molybdenum, or other alloys) content (such as certain exhaust systems) and, based on the nature of the scrap and purchase specifications, that the type of scrap is not reasonably expected to contain mercury switches.

(4) *Scrap that does not contain motor vehicle scrap.* For scrap not subject to the requirements in paragraphs (b)(1) through (3) of this section, you must certify in your notification of compliance status and maintain records of documentation that this scrap does not contain motor vehicle scrap.

§ 63.10886 What are my management practices for binder formulations?

For each furfuryl alcohol warm box mold or core making line at a new or existing iron and steel foundry, you must use a binder chemical formulation that does not use methanol as a specific ingredient of the catalyst formulation. This requirement does not apply to the resin portion of the binder system.

Requirements for New and Existing Affected Sources Classified as Small Foundries

§ 63.10890 What are my management practices and compliance requirements?

(a) You must comply with the pollution prevention management practices for metallic scrap and mercury switches in §63.10885 and binder formulations in §63.10886.

(b) You must submit an initial notification of applicability according to §63.9(b)(2).

(c) You must submit a notification of compliance status according to §63.9(h)(1)(i). You must send the notification of compliance status before the close of business on the 30th day after the applicable compliance date specified in §63.10881. The notification must include the following compliance certifications, as applicable:

(1) “This facility has prepared, and will operate by, written material specifications for metallic scrap according to §63.10885(a)(1)” and/or “This facility has prepared, and will operate by, written material specifications for general iron and steel scrap according to §63.10885(a)(2).”

(2) “This facility has prepared, and will operate by, written material specifications for the removal of mercury switches and a site-specific plan implementing the material specifications according to §63.10885(b)(1) and/or “This facility participates in and purchases motor vehicle scrap only from scrap providers who participate in a program for removal of mercury switches that has been approved by the Administrator according to §63.10885(b)(2) and has prepared a plan for participation in the EPA-approved program according to §63.10885(b)(2)(iv)” and/or “The only materials from motor vehicles in the scrap charged to a metal melting furnace at this facility are materials recovered for their specialty alloy content in accordance with §63.10885(b)(3) which are not reasonably expected to contain mercury switches” and/or “This facility complies with the requirements for scrap that does not contain motor vehicle scrap in accordance with §63.10885(b)(4).”

(3) “This facility complies with the no methanol requirement for the catalyst portion of each binder chemical formulation for a furfuryl alcohol warm box mold or core making line according to §63.10886.”

(d) As required by §63.10(b)(1), you must maintain files of all information (including all reports and notifications) for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche.

(e) You must maintain records of the information specified in paragraphs (e)(1) through (7) of this section according to the requirements in §63.10(b)(1).

(1) Records supporting your initial notification of applicability and your notification of compliance status according to §63.10(b)(2)(xiv).

(2) Records of your written materials specifications according to §63.10885(a) and records that demonstrate compliance with the requirements for restricted metallic scrap in §63.10885(a)(1) and/or for the use of general scrap in §63.10885(a)(2) and for mercury in §63.10885(b)(1) through (3), as applicable. You must keep records documenting compliance with §63.10885(b)(4) for scrap that does not contain motor vehicle scrap.

(3) If you are subject to the requirements for a site-specific plan for mercury switch removal under §63.10885(b)(1), you must:

(i) Maintain records of the number of mercury switches removed or the weight of mercury recovered from the switches and properly managed, the estimated number of vehicles processed, and an estimate of the percent of mercury switches recovered; and

(ii) Submit semiannual reports of the number of mercury switches removed or the weight of mercury recovered from the switches and properly managed, the estimated number of vehicles processed, an estimate of the percent of mercury switches recovered, and a certification that the recovered mercury switches were recycled at RCRA-permitted facilities. The semiannual reports must include a certification that you have conducted periodic inspections or taken other means of corroboration as required under §63.10885(b)(1)(ii)(C). You must identify which option in paragraph §63.10885(b) applies to each scrap provider, contract, or shipment. You may include this information in the semiannual compliance reports required under paragraph (f) of this section.

(4) If you are subject to the option for approved mercury programs under §63.10885(b)(2), you must maintain records identifying each scrap provider and documenting the scrap provider's participation in an approved mercury switch removal program. If you purchase motor vehicle scrap from a broker, you must maintain records identifying each broker and documentation that all scrap provided by the broker was obtained from other scrap providers who participate in an approved mercury switch removal program.

(5) Records to document use of binder chemical formulation that does not contain methanol as a specific ingredient of the catalyst formulation for each furfuryl alcohol warm box mold or core making line as required by §63.10886. These records must be the Material Safety Data Sheet (provided that it contains appropriate information), a certified product data sheet, or a manufacturer's hazardous air pollutant data sheet.

(6) Records of the annual quantity and composition of each HAP-containing chemical binder or coating material used to make molds and cores. These records must be copies of purchasing records, Material Safety Data Sheets, or other documentation that provides information on the binder or coating materials used.

(7) Records of metal melt production for each calendar year.

(f) You must submit semiannual compliance reports to the Administrator according to the requirements in §63.10(e). The report must clearly identify any deviation from the pollution prevention management practices in §§63.10885 or 63.10886 and the corrective action taken.

(g) You must submit a written notification to the Administrator of the initial classification of your facility as a small foundry as required in §63.10880(f) and (g), as applicable, and for any subsequent reclassification as required in §63.10881(d)(1) or (e), as applicable.

(h) Following the initial determination for an existing affected source as a small foundry, if the annual metal melt production exceeds 20,000 tons during the preceding year, you must comply with the requirements for large foundries by the applicable dates in §63.10881(d)(1)(i) or (d)(1)(ii). Following the initial determination for a new affected source as a small foundry, if you increase the annual metal melt capacity to exceed 10,000 tons, you must comply with the requirements for a large foundry by the applicable dates in §63.10881(e)(1).

(i) You must comply with the following requirements of the General Provisions (40 CFR part 63, subpart A): §§63.1 through 63.5; §63.6(a), (b), (c), and (e)(1); §63.9; §63.10(a), (b)(1), (b)(2)(xiv), (b)(3), (d)(1), (d)(4), and (f); and §§63.13 through

63.16. Requirements of the General Provisions not cited in the preceding sentence do not apply to the owner or operator of a new or existing affected source that is classified as a small foundry.

Requirements for New and Existing Affected Sources Classified as Large Iron and Steel Foundries

§ 63.10895 What are my standards and management practices?

(a) If you own or operate an affected source that is a large foundry as defined in §63.10906, you must comply with the pollution prevention management practices in §§63.10885 and 63.10886, the requirements in paragraphs (b) through (e) of this section, and the requirements in §§63.10896 through 63.10900.

(b) You must operate a capture and collection system for each metal melting furnace at a new or existing iron and steel foundry unless that furnace is specifically uncontrolled as part of an emissions averaging group. Each capture and collection system must meet accepted engineering standards, such as those published by the American Conference of Governmental Industrial Hygienists.

(c) You must not discharge to the atmosphere emissions from any metal melting furnace or group of all metal melting furnaces that exceed the applicable limit in paragraph (c)(1) or (2) of this section. When an alternative emissions limit is provided for a given emissions source, you are not restricted in the selection of which applicable alternative emissions limit is used to demonstrate compliance.

(1) For an existing iron and steel foundry, 0.8 pounds of particulate matter (PM) per ton of metal charged or 0.06 pounds of total metal HAP per ton of metal charged.

(2) For a new iron and steel foundry, 0.1 pounds of PM per ton of metal charged or 0.008 pounds of total metal HAP per ton of metal charged.

(d) If you own or operate a new affected source, you must comply with each control device parameter operating limit in paragraphs (d)(1) and (2) of this section that applies to you.

(1) For each wet scrubber applied to emissions from a metal melting furnace, you must maintain the 3-hour average pressure drop and scrubber water flow rate at or above the minimum levels established during the initial or subsequent performance test.

(2) For each electrostatic precipitator applied to emissions from a metal melting furnace, you must maintain the voltage and secondary current (or total power input) to the control device at or above the level established during the initial or subsequent performance test.

(e) If you own or operate a new or existing iron and steel foundry, you must not discharge to the atmosphere fugitive emissions from foundry operations that exhibit opacity greater than 20 percent (6-minute average), except for one 6-minute average per hour that does not exceed 30 percent.

§ 63.10896 What are my operation and maintenance requirements?

(a) You must prepare and operate at all times according to a written operation and maintenance (O&M) plan for each control device for an emissions source subject to a PM, metal HAP, or opacity emissions limit in §63.10895. You must maintain a copy of the O&M plan at the facility and make it available for review upon request. At a minimum, each plan must contain the following information:

(1) General facility and contact information;

(2) Positions responsible for inspecting, maintaining, and repairing emissions control devices which are used to comply with this subpart;

(3) Description of items, equipment, and conditions that will be inspected, including an inspection schedule for the items, equipment, and conditions. For baghouses that are equipped with bag leak detection systems, the O&M plan must include the site-specific monitoring plan required in §63.10897(d)(2).

(4) Identity and estimated quantity of the replacement parts that will be maintained in inventory; and

(5) For a new affected source, procedures for operating and maintaining a CPMS in accordance with manufacturer's specifications.

(b) You may use any other O&M, preventative maintenance, or similar plan which addresses the requirements in paragraph (a)(1) through (5) of this section to demonstrate compliance with the requirements for an O&M plan.

§ 63.10897 What are my monitoring requirements?

(a) You must conduct an initial inspection of each PM control device for a metal melting furnace at an existing affected source. You must conduct each initial inspection no later than 60 days after your applicable compliance date for each installed control device which has been operated within 60 days of the compliance date. For an installed control device which has not operated within 60 days of the compliance date, you must conduct an initial inspection prior to startup of the control device. Following the initial inspections, you must perform periodic inspections and maintenance of each PM control device for a metal melting furnace at an existing affected source. You must perform the initial and periodic inspections according to the requirements in paragraphs (a)(1) through (4) of this section. You must record the results of each initial and periodic inspection and any maintenance action in the logbook required in §63.10899(b)(13).

(1) For the initial inspection of each baghouse, you must visually inspect the system ductwork and baghouse units for leaks. You must also inspect the inside of each baghouse for structural integrity and fabric filter condition. Following the initial inspections, you must inspect and maintain each baghouse according to the requirements in paragraphs (a)(1)(i) and (ii) of this section.

(i) You must conduct monthly visual inspections of the system ductwork for leaks.

(ii) You must conduct inspections of the interior of the baghouse for structural integrity and to determine the condition of the fabric filter every 6 months.

(2) For the initial inspection of each dry electrostatic precipitator, you must verify the proper functioning of the electronic controls for corona power and rapper operation, that the corona wires are energized, and that adequate air pressure is present on the rapper manifold. You must also visually inspect the system ductwork and electrostatic housing unit and hopper for leaks and inspect the interior of the electrostatic precipitator to determine the condition and integrity of corona wires, collection plates, hopper, and air diffuser plates. Following the initial inspection, you must inspect and maintain each dry electrostatic precipitator according to the requirements in paragraphs (a)(2)(i) through (iii) of this section.

(i) You must conduct a daily inspection to verify the proper functioning of the electronic controls for corona power and rapper operation, that the corona wires are energized, and that adequate air pressure is present on the rapper manifold.

(ii) You must conduct monthly visual inspections of the system ductwork, housing unit, and hopper for leaks.

(iii) You must conduct inspections of the interior of the electrostatic precipitator to determine the condition and integrity of corona wires, collection plates, plate rappers, hopper, and air diffuser plates every 24 months.

(3) For the initial inspection of each wet electrostatic precipitator, you must verify the proper functioning of the electronic controls for corona power, that the corona wires are energized, and that water flow is present. You must also visually inspect the system ductwork and electrostatic precipitator housing unit and hopper for leaks and inspect the interior of the electrostatic precipitator to determine the condition and integrity of corona wires, collection plates, plate wash spray heads, hopper, and air diffuser plates. Following the initial inspection, you must inspect and maintain each wet electrostatic precipitator according to the requirements in paragraphs (a)(3)(i) through (iii) of this section.

(i) You must conduct a daily inspection to verify the proper functioning of the electronic controls for corona power, that the corona wires are energized, and that water flow is present.

(ii) You must conduct monthly visual inspections of the system ductwork, electrostatic precipitator housing unit, and hopper for leaks.

(iii) You must conduct inspections of the interior of the electrostatic precipitator to determine the condition and integrity of corona wires, collection plates, plate wash spray heads, hopper, and air diffuser plates every 24 months.

(4) For the initial inspection of each wet scrubber, you must verify the presence of water flow to the scrubber. You must also visually inspect the system ductwork and scrubber unit for leaks and inspect the interior of the scrubber for structural integrity and the condition of the demister and spray nozzle. Following the initial inspection, you must inspect and maintain each wet scrubber according to the requirements in paragraphs (a)(4)(i) through (iii) of this section.

(i) You must conduct a daily inspection to verify the presence of water flow to the scrubber.

(ii) You must conduct monthly visual inspections of the system ductwork and scrubber unit for leaks.

(iii) You must conduct inspections of the interior of the scrubber to determine the structural integrity and condition of the demister and spray nozzle every 12 months.

(b) For each wet scrubber applied to emissions from a metal melting furnace at a new affected source, you must use a continuous parameter monitoring system (CPMS) to measure and record the 3-hour average pressure drop and scrubber water flow rate.

(c) For each electrostatic precipitator applied to emissions from a metal melting furnace at a new affected source, you must measure and record the hourly average voltage and secondary current (or total power input) using a CPMS.

(d) If you own or operate an existing affected source, you may install, operate, and maintain a bag leak detection system for each negative pressure baghouse or positive pressure baghouse as an alternative to the baghouse inspection requirements in paragraph (a)(1) of this section. If you own or operate a new affected source, you must install, operate, and maintain a bag leak detection system for each negative pressure baghouse or positive pressure baghouse. You must install, operate, and maintain each bag leak detection system according to the requirements in paragraphs (d)(1) through (3) of this section.

(1) Each bag leak detection system must meet the requirements in paragraphs (d)(1)(i) through (vii) of this section.

(i) The system must be certified by the manufacturer to be capable of detecting emissions of particulate matter at concentrations of 10 milligrams per actual cubic meter (0.00044 grains per actual cubic foot) or less.

(ii) The bag leak detection system sensor must provide output of relative particulate matter loadings and the owner or operator shall continuously record the output from the bag leak detection system using a strip chart recorder, data logger, or other means.

(iii) The system must be equipped with an alarm that will sound when an increase in relative particulate loadings is detected over the alarm set point established in the operation and maintenance plan, and the alarm must be located such that it can be heard by the appropriate plant personnel.

(iv) The initial adjustment of the system must, at minimum, consist of establishing the baseline output by adjusting the sensitivity (range) and the averaging period of the device, and establishing the alarm set points. If the system is equipped with an alarm delay time feature, you also must adjust the alarm delay time.

(v) Following the initial adjustment, do not adjust the sensitivity or range, averaging period, alarm set point, or alarm delay time. Except, once per quarter, you may adjust the sensitivity of the bag leak detection system to account for seasonable effects including temperature and humidity according to the procedures in the monitoring plan required by paragraph (d)(2) of this section.

(vi) For negative pressure baghouses, induced air baghouses, and positive pressure baghouses that are discharged to the atmosphere through a stack, the bag leak detector sensor must be installed downstream of the baghouse and upstream of any wet scrubber.

(vii) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.

(2) You must prepare a site-specific monitoring plan for each bag leak detection system to be incorporated in your O&M plan. You must operate and maintain each bag leak detection system according to the plan at all times. Each plan must address all of the items identified in paragraphs (d)(2)(i) through (vi) of this section.

(i) Installation of the bag leak detection system.

(ii) Initial and periodic adjustment of the bag leak detection system including how the alarm set-point will be established.

(iii) Operation of the bag leak detection system including quality assurance procedures.

(iv) Maintenance of the bag leak detection system including a routine maintenance schedule and spare parts inventory list.

(v) How the bag leak detection system output will be recorded and stored.

(vi) Procedures for determining what corrective actions are necessary in the event of a bag leak detection alarm as required in paragraph (d)(3) of this section.

(3) In the event that a bag leak detection system alarm is triggered, you must initiate corrective action to determine the cause of the alarm within 1 hour of the alarm, initiate corrective action to correct the cause of the problem within 24 hours of the alarm, and complete corrective action as soon as practicable, but no later than 10 calendar days from the date of the alarm. You must record the date and time of each valid alarm, the time you initiated corrective action, the correction action taken, and the date on which corrective action was completed. Corrective actions may include, but are not limited to:

(i) Inspecting the bag house for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in emissions.

(ii) Sealing off defective bags or filter media.

(iii) Replacing defective bags or filter media or otherwise repairing the control device.

(iv) Sealing off a defective baghouse department.

(v) Cleaning the bag leak detection system probe, or otherwise repairing the bag leak detection system.

(vi) Shutting down the process producing the particulate emissions.

(e) You must make monthly inspections of the equipment that is important to the performance of the total capture system (i.e., pressure sensors, dampers, and damper switches). This inspection must include observations of the physical appearance of the equipment (e.g., presence of holes in the ductwork or hoods, flow constrictions caused by dents or accumulated dust in the ductwork, and fan erosion). You must repair any defect or deficiency in the capture system as soon as practicable, but no later than 90 days. You must record the date and results of each inspection and the date of repair of any defect or deficiency.

(f) You must install, operate, and maintain each CPMS or other measurement device according to your O&M plan. You must record all information needed to document conformance with these requirements.

(g) In the event of an exceedance of an established emissions limitation (including an operating limit), you must restore operation of the emissions source (including the control device and associated capture system) to its normal or usual manner or operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. 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 exceedance. You must record the date and time correction action was initiated, the correction action taken, and the date corrective action was completed.

(h) If you choose to comply with an emissions limit in §63.10895(c) using emissions averaging, you must calculate and record for each calendar month the pounds of PM or total metal HAP per ton of metal melted from the group of all metal melting furnaces at your foundry. You must calculate and record the weighted average pounds per ton emissions rate for the group of all metal melting furnaces at the foundry determined from the performance test procedures in §63.10898(d) and (e).

§ 63.10898 What are my performance test requirements?

(a) You must conduct a performance test to demonstrate initial compliance with the applicable emissions limits for each metal melting furnace or group of all metal melting furnaces that is subject to an emissions limit in §63.10895(c) and for each building or structure housing foundry operations that is subject to the opacity limit for fugitive emissions in §63.10895(e). You

must conduct the test within 180 days of your compliance date and report the results in your notification of compliance status.

(1) If you own or operate an existing iron and steel foundry, you may choose to submit the results of a prior performance test for PM or total metal HAP that demonstrates compliance with the applicable emissions limit for a metal melting furnace or group of all metal melting furnaces provided the test was conducted within the last 5 years using the methods and procedures specified in this subpart and either no process changes have been made since the test, or you can demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance with the applicable emissions limit despite such process changes.

(2) If you own or operate an existing iron and steel foundry and you choose to submit the results of a prior performance test according to paragraph (a)(1) of this section, you must submit a written notification to the Administrator of your intent to use the previous test data no later than 60 days after your compliance date. The notification must contain a full copy of the performance test and contain information to demonstrate, if applicable, that either no process changes have been made since the test, or that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite such process changes.

(3) If you have an electric induction furnace equipped with an emissions control device at an existing foundry, you may use the test results from another electric induction furnace to demonstrate compliance with the applicable PM or total metal HAP emissions limit in §63.10895(c) provided the furnaces are similar with respect to the type of emission control device that is used, the composition of the scrap charged, furnace size, and furnace melting temperature.

(4) If you have an uncontrolled electric induction furnace at an existing foundry, you may use the test results from another electric induction furnace to demonstrate compliance with the applicable PM or total metal HAP emissions limit in §63.10895(c) provided the test results are prior to any control device and the electric induction furnaces are similar with respect to the composition of the scrap charged, furnace size, and furnace melting temperature.

(5) For electric induction furnaces that do not have emission capture systems, you may install a temporary enclosure for the purpose of representative sampling of emissions. A permanent enclosure and capture system is not required for the purpose of the performance test.

(b) You must conduct subsequent performance tests to demonstrate compliance with all applicable PM or total metal HAP emissions limits in §63.10895(c) for a metal melting furnace or group of all metal melting furnaces no less frequently than every 5 years and each time you elect to change an operating limit or make a process change likely to increase HAP emissions.

(c) You must conduct each performance test according to the requirements in §63.7(e)(1), Table 1 to this subpart, and paragraphs (d) through (g) of this section.

(d) To determine compliance with the applicable PM or total metal HAP emissions limit in §63.10895(c) for a metal melting furnace in a lb/ton of metal charged format, compute the process-weighted mass emissions (E^p) for each test run using Equation 1 of this section:

$$E_p = \frac{C \times Q \times T}{P \times K} \qquad \text{(Eq. 1)}$$

Where:

E_p= Process-weighted mass emissions rate of PM or total metal HAP, pounds of PM or total metal HAP per ton (lb/ton) of metal charged;

C = Concentration of PM or total metal HAP measured during performance test run, grains per dry standard cubic foot (gr/dscf);

Q = Volumetric flow rate of exhaust gas, dry standard cubic feet per hour (dscf/hr);

T = Total time during a test run that a sample is withdrawn from the stack during melt production cycle, hr;

P = Total amount of metal charged during the test run, tons; and

K = Conversion factor, 7,000 grains per pound.

(e) To determine compliance with the applicable emissions limit in §63.10895(c) for a group of all metal melting furnaces using emissions averaging,

(1) Determine and record the monthly average charge rate for each metal melting furnace at your iron and steel foundry for the previous calendar month; and

(2) Compute the mass-weighted PM or total metal HAP using Equation 2 of this section.

$$E_c = \frac{\sum_{i=1}^{n}\left(E_{pi} \times T_{ti}\right)}{\sum_{i=1}^{n} T_{ti}} \qquad \text{(Eq. 2)}$$

Where:

E_C= The mass-weighted PM or total metal HAP emissions for the group of all metal melting furnaces at the foundry, pounds of PM or total metal HAP per ton of metal charged;

E_{pi}= Process-weighted mass emissions of PM or total metal HAP for individual emission unit i as determined from the performance test and calculated using Equation 1 of this section, pounds of PM or total metal HAP per ton of metal charged;

T_{ti}= Total tons of metal charged for individual emission unit i for the calendar month prior to the performance test, tons; and

n = The total number of metal melting furnaces at the iron and steel foundry.

(3) For an uncontrolled electric induction furnace that is not equipped with a capture system and has not been previously tested for PM or total metal HAP, you may assume an emissions factor of 2 pounds per ton of PM or 0.13 pounds of total metal HAP per ton of metal melted in Equation 2 of this section instead of a measured test value. If the uncontrolled electric induction furnace is equipped with a capture system, you must use a measured test value.

(f) To determine compliance with the applicable PM or total metal HAP emissions limit for a metal melting furnace in §63.10895(c) when emissions from one or more regulated furnaces are combined with other non-regulated emissions sources, you may demonstrate compliance using the procedures in paragraphs (f)(1) through (3) of this section.

(1) Determine the PM or total metal HAP process-weighted mass emissions for each of the regulated streams prior to the combination with other exhaust streams or control device.

(2) Measure the flow rate and PM or total metal HAP concentration of the combined exhaust stream both before and after the control device and calculate the mass removal efficiency of the control device using Equation 3 of this section.

$$\%\ \text{reduction} = \frac{E_i - E_o}{E_i} \times 100\% \qquad \text{(Eq. 3)}$$

Where:

E_i= Mass emissions rate of PM or total metal HAP at the control device inlet, lb/hr;

E_o= Mass emissions rate of PM or total metal HAP at the control device outlet, lb/hr.

(3) Meet the applicable emissions limit based on the calculated PM or total metal HAP process-weighted mass emissions for the regulated emissions source using Equation 4 of this section:

$$E_{p1released} = E_{p1i} \times \left(1 - \frac{\%\ reduction}{100}\right) \qquad \text{(Eq. 4)}$$

Where:

$E_{p1released}$= Calculated process-weighted mass emissions of PM (or total metal HAP) predicted to be released to the atmosphere from the regulated emissions source, pounds of PM or total metal HAP per ton of metal charged; and

E_{p1i}= Process-weighted mass emissions of PM (or total metal HAP) in the uncontrolled regulated exhaust stream, pounds of PM or total metal HAP per ton of metal charged.

(g) To determine compliance with an emissions limit for situations when multiple sources are controlled by a single control device, but only one source operates at a time or other situations that are not expressly considered in paragraphs (d) through (f) of this section, you must submit a site-specific test plan to the Administrator for approval according to the requirements in §63.7(c)(2) and (3).

(h) You must conduct each opacity test for fugitive emissions according to the requirements in §63.6(h)(5) and Table 1 to this subpart.

(i) You must conduct subsequent performance tests to demonstrate compliance with the opacity limit in §63.10895(e) no less frequently than every 6 months and each time you make a process change likely to increase fugitive emissions.

(j) In your performance test report, you must certify that the capture system operated normally during the performance test.

(k) You must establish operating limits for a new affected source during the initial performance test according to the requirements in Table 2 of this subpart.

(l) You may change the operating limits for a wet scrubber, electrostatic precipitator, or baghouse if you meet the requirements in paragraphs (l)(1) through (3) of this section.

(1) Submit a written notification to the Administrator of your plan to conduct a new performance test to revise the operating limit.

(2) Conduct a performance test to demonstrate compliance with the applicable emissions limitation in §63.10895(c).

(3) Establish revised operating limits according to the applicable procedures in Table 2 to this subpart.

§ 63.10899 What are my recordkeeping and reporting requirements?

(a) As required by §63.10(b)(1), you must maintain files of all information (including all reports and notifications) for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche.

(b) In addition to the records required by 40 CFR 63.10, you must keep records of the information specified in paragraphs (b)(1) through (13) of this section.

(1) You must keep records of your written materials specifications according to §63.10885(a) and records that demonstrate compliance with the requirements for restricted metallic scrap in §63.10885(a)(1) and/or for the use of general scrap in §63.10885(a)(2) and for mercury in §63.10885(b)(1) through (3), as applicable. You must keep records documenting compliance with §63.10885(b)(4) for scrap that does not contain motor vehicle scrap.

(2) If you are subject to the requirements for a site-specific plan for mercury under §63.10885(b)(1), you must:

(i) Maintain records of the number of mercury switches removed or the weight of mercury recovered from the switches and properly managed, the estimated number of vehicles processed, and an estimate of the percent of mercury switches recovered; and

(ii) Submit semiannual reports of the number of mercury switches removed or the weight of mercury recovered from the switches and properly managed, the estimated number of vehicles processed, an estimate of the percent of mercury switches recovered, and a certification that the recovered mercury switches were recycled at RCRA-permitted facilities. The semiannual reports must include a certification that you have conducted periodic inspections or taken other means of corroboration as required under §63.10885(b)(1)(ii)(C). You must identify which option in §63.10885(b) applies to each scrap provider, contract, or shipment. You may include this information in the semiannual compliance reports required under paragraph (c) of this section.

(3) If you are subject to the option for approved mercury programs under §63.10885(b)(2), you must maintain records identifying each scrap provider and documenting the scrap provider's participation in an approved mercury switch removal program. If your scrap provider is a broker, you must maintain records identifying each of the broker's scrap suppliers and documenting the scrap supplier's participation in an approved mercury switch removal program.

(4) You must keep records to document use of any binder chemical formulation that does not contain methanol as a specific ingredient of the catalyst formulation for each furfuryl alcohol warm box mold or core making line as required by §63.10886. These records must be the Material Safety Data Sheet (provided that it contains appropriate information), a certified product data sheet, or a manufacturer's hazardous air pollutant data sheet.

(5) You must keep records of the annual quantity and composition of each HAP-containing chemical binder or coating material used to make molds and cores. These records must be copies of purchasing records, Material Safety Data Sheets, or other documentation that provide information on the binder or coating materials used.

(6) You must keep records of monthly metal melt production for each calendar year.

(7) You must keep a copy of the operation and maintenance plan as required by §63.10896(a) and records that demonstrate compliance with plan requirements.

(8) If you use emissions averaging, you must keep records of the monthly metal melting rate for each furnace at your iron and steel foundry, and records of the calculated pounds of PM or total metal HAP per ton of metal melted for the group of all metal melting furnaces required by §63.10897(h).

(9) If applicable, you must keep records for bag leak detection systems as follows:

(i) Records of the bag leak detection system output;

(ii) Records of bag leak detection system adjustments, including the date and time of the adjustment, the initial bag leak detection system settings, and the final bag leak detection system settings; and

(iii) The date and time of all bag leak detection system alarms, and for each valid alarm, the time you initiated corrective action, the corrective action taken, and the date on which corrective action was completed.

(10) You must keep records of capture system inspections and repairs as required by §63.10897(e).

(11) You must keep records demonstrating conformance with your specifications for the operation of CPMS as required by §63.10897(f).

(12) You must keep records of corrective action(s) for exceedances and excursions as required by §63.10897(g).

(13) You must record the results of each inspection and maintenance required by §63.10897(a) for PM control devices in a logbook (written or electronic format). You must keep the logbook onsite and make the logbook available to the Administrator upon request. You must keep records of the information specified in paragraphs (b)(13)(i) through (iii) of this section.

(i) The date and time of each recorded action for a fabric filter, the results of each inspection, and the results of any maintenance performed on the bag filters.

(ii) The date and time of each recorded action for a wet or dry electrostatic precipitator (including ductwork), the results of each inspection, and the results of any maintenance performed for the electrostatic precipitator.

(iii) The date and time of each recorded action for a wet scrubber (including ductwork), the results of each inspection, and the results of any maintenance performed on the wet scrubber.

(c) You must submit semiannual compliance reports to the Administrator according to the requirements in §63.10(e). The reports must include, at a minimum, the following information as applicable:

(1) Summary information on the number, duration, and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective action taken;

(2) Summary information on the number, duration, and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other calibration checks, if applicable); and

(3) Summary information on any deviation from the pollution prevention management practices in §§63.10885 and 63.10886 and the operation and maintenance requirements §63.10896 and the corrective action taken.

(d) You must submit written notification to the Administrator of the initial classification of your new or existing affected source as a large iron and steel facility as required in §63.10880(f) and (g), as applicable, and for any subsequent reclassification as required in §63.10881(d) or (e), as applicable.

§ 63.10900 What parts of the General Provisions apply to my large foundry?

(a) If you own or operate a new or existing affected source that is classified as a large foundry, you must comply with the requirements of the General Provisions (40 CFR part 63, subpart A) according to Table 3 of this subpart.

(b) If you own or operator a new or existing affected source that is classified as a large foundry, your notification of compliance status required by §63.9(h) must include each applicable certification of compliance, signed by a responsible official, in Table 4 of this subpart.

Other Requirements and Information

§ 63.10905 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by EPA or a delegated authority such as your State, local, or tribal agency. If the EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency has the authority to implement and enforce this subpart. You should contact your EPA Regional Office to find out if implementation and enforcement of this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under 40 CFR part 63, subpart E, the authorities contained in paragraph (c) of this section are retained by the EPA Administrator and are not transferred to the State, local, or tribal agency.

(c) The authorities that cannot be delegated to State, local, or tribal agencies are specified in paragraphs (c)(1) through (6) of this section.

(1) Approval of an alternative non-opacity emissions standard under 40 CFR 63.6(g).

(2) Approval of an alternative opacity emissions standard under §63.6(h)(9).

(3) Approval of a major change to test methods under §63.7(e)(2)(ii) and (f). A “major change to test method” is defined in §63.90.

(4) Approval of a major change to monitoring under §63.8(f). A “major change to monitoring” under is defined in §63.90.

(5) Approval of a major change to recordkeeping and reporting under §63.10(f). A “major change to recordkeeping/reporting” is defined in §63.90.

(6) Approval of a local, State, or national mercury switch removal program under §63.10885(b)(2).

§ 63.10906 What definitions apply to this subpart?

Terms used in this subpart are defined in the Clean Air Act, in §63.2, and in this section.

Annual metal melt capacity means the lower of the total metal melting furnace equipment melt rate capacity assuming 8,760 operating hours per year summed for all metal melting furnaces at the foundry or, if applicable, the maximum permitted metal melt production rate for the iron and steel foundry calculated on an annual basis. Unless otherwise specified in the permit, permitted metal melt production rates that are not specified on an annual basis must be annualized assuming 24 hours per day, 365 days per year of operation. If the permit limits the operating hours of the furnace(s) or foundry, then the permitted operating hours are used to annualize the maximum permitted metal melt production rate.

Annual metal melt production means the quantity of metal melted in a metal melting furnace or group of all metal melting furnaces at the iron and steel foundry in a given calendar year. For the purposes of this subpart, metal melt production is determined on the basis on the quantity of metal charged to each metal melting furnace; the sum of the metal melt production for each furnace in a given calendar year is the annual metal melt production of the foundry.

Bag leak detection system means a system that is capable of continuously monitoring relative particulate matter (dust) loadings in the exhaust of a baghouse to detect bag leaks and other upset conditions. A bag leak detection system includes, but is not limited to, an instrument that operates on triboelectric, electrodynamic, light scattering, light transmittance, or other effect to continuously monitor relative particulate matter loadings.

Binder chemical means a component of a system of chemicals used to bind sand together into molds, mold sections, and cores through chemical reaction as opposed to pressure.

Capture system means the collection of components used to capture gases and fumes released from one or more emissions points and then convey the captured gas stream to a control device or to the atmosphere. A capture system may include, but is not limited to, the following components as applicable to a given capture system design: Duct intake devices, hoods, enclosures, ductwork, dampers, manifolds, plenums, and fans.

Chlorinated plastics means solid polymeric materials that contain chlorine in the polymer chain, such as polyvinyl chloride (PVC) and PVC copolymers.

Control device means the air pollution control equipment used to remove particulate matter from the effluent gas stream generated by a metal melting furnace.

Cupola means a vertical cylindrical shaft furnace that uses coke and forms of iron and steel such as scrap and foundry returns as the primary charge components and melts the iron and steel through combustion of the coke by a forced upward flow of heated air.

Deviation means any instance in which an affected source or an owner or operator of such an affected source:

(1) Fails to meet any requirement or obligation established by this subpart including, but not limited to, any emissions limitation (including operating limits), management practice, or operation and maintenance requirement;

(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any iron and steel foundry required to obtain such a permit; or

(3) Fails to meet any emissions limitation (including operating limits) or management standard in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.

Electric arc furnace means a vessel in which forms of iron and steel such as scrap and foundry returns are melted through resistance heating by an electric current flowing through the arcs formed between the electrodes and the surface of the metal and also flowing through the metal between the arc paths.

Electric induction furnace means a vessel in which forms of iron and steel such as scrap and foundry returns are melted though resistance heating by an electric current that is induced in the metal by passing an alternating current through a coil surrounding the metal charge or surrounding a pool of molten metal at the bottom of the vessel.

Exhaust stream means gases emitted from a process through a conveyance as defined in this subpart.

Foundry operations mean all process equipment and practices used to produce metal castings for shipment. *Foundry operations* include: Mold or core making and coating; scrap handling and preheating; metal melting and inoculation; pouring, cooling, and shakeout; shotblasting, grinding, and other metal finishing operations; and sand handling.

Free liquids means material that fails the paint filter liquids test by EPA Method 9095B, Revision 2, November 1994 (incorporated by reference—see §63.14). That is, if any portion of the material passes through and drops from the filter within the 5-minute test period, the material contains *free liquids* .

Fugitive emissions means any pollutant released to the atmosphere that is not discharged through a system of equipment that is specifically designed to capture pollutants at the source, convey them through ductwork, and exhaust them using forced ventilation. *Fugitive emissions* include pollutants released to the atmosphere through windows, doors, vents, or other building openings. *Fugitive emissions* also include pollutants released to the atmosphere through other general building ventilation or exhaust systems not specifically designed to capture pollutants at the source.

Furfuryl alcohol warm box mold or core making line means a mold or core making line in which the binder chemical system used is that system commonly designated as a furfuryl alcohol warm box system by the foundry industry.

Iron and steel foundry means a facility or portion of a facility that melts scrap, ingot, and/or other forms of iron and/or steel and pours the resulting molten metal into molds to produce final or near final shape products for introduction into commerce. Research and development facilities, operations that only produce non-commercial castings, and operations associated with nonferrous metal production are not included in this definition.

Large foundry means, for an existing affected source, an iron and steel foundry with an annual metal melt production greater than 20,000 tons. For a new affected source, *large foundry* means an iron and steel foundry with an annual metal melt capacity greater than 10,000 tons.

Mercury switch means each mercury-containing capsule or switch assembly that is part of a convenience light switch mechanism installed in a vehicle.

Metal charged means the quantity of scrap metal, pig iron, metal returns, alloy materials, and other solid forms of iron and steel placed into a metal melting furnace. Metal charged does not include the quantity of fluxing agents or, in the case of a cupola, the quantity of coke that is placed into the metal melting furnace.

Metal melting furnace means a cupola, electric arc furnace, electric induction furnace, or similar device that converts scrap, foundry returns, and/or other solid forms of iron and/or steel to a liquid state. This definition does not include a holding furnace, an argon oxygen decarburization vessel, or ladle that receives molten metal from a metal melting furnace, to which metal ingots or other material may be added to adjust the metal chemistry.

Mold or core making line means the collection of equipment that is used to mix an aggregate of sand and binder chemicals, form the aggregate into final shape, and harden the formed aggregate. This definition does not include a line for making greensand molds or cores.

Motor vehicle means an automotive vehicle not operated on rails and usually is operated with rubber tires for use on highways.

Motor vehicle scrap means vehicle or automobile bodies, including automobile body hulks, that have been processed through a shredder. *Motor vehicle scrap* does not include automobile manufacturing bundles, or miscellaneous vehicle parts, such as wheels, bumpers, or other components that do not contain mercury switches.

Nonferrous metal means any pure metal other than iron or any metal alloy for which an element other than iron is its major constituent in percent by weight.

On blast means those periods of cupola operation when combustion (blast) air is introduced to the cupola furnace and the furnace is capable of producing molten metal. On blast conditions are characterized by both blast air introduction and molten metal production.

Responsible official means responsible official as defined in §63.2.

Scrap preheater means a vessel or other piece of equipment in which metal scrap that is to be used as melting furnace feed is heated to a temperature high enough to eliminate volatile impurities or other tramp materials by direct flame heating or similar means of heating. Scrap dryers, which solely remove moisture from metal scrap, are not considered to be scrap preheaters for purposes of this subpart.

Scrap provider means the person (including a broker) who contracts directly with an iron and steel foundry to provide motor vehicle scrap. Scrap processors such as shredder operators or vehicle dismantlers that do not sell scrap directly to a foundry are not *scrap providers* .

Scrubber blowdown means liquor or slurry discharged from a wet scrubber that is either removed as a waste stream or processed to remove impurities or adjust its composition or pH.

Small foundry means, for an existing affected source, an iron and steel foundry that has an annual metal melt production of 20,000 tons or less. For a new affected source, *small foundry* means an iron and steel foundry that has an annual metal melt capacity of 10,000 tons or less.

Total metal HAP means, for the purposes of this subpart, the sum of the concentrations of compounds of antimony, arsenic, beryllium, cadmium, chromium, cobalt, lead, manganese, mercury, nickel, and selenium as measured by EPA Method 29 (40 CFR part 60, appendix A–8). Only the measured concentration of the listed analytes that are present at concentrations exceeding one-half the quantitation limit of the analytical method are to be used in the sum. If any of the analytes are not detected or are detected at concentrations less than one-half the quantitation limit of the analytical method, the concentration of those analytes will be assumed to be zero for the purposes of calculating the total metal HAP for this subpart.

Table 1 to Subpart ZZZZZ of Part 63—Performance Test Requirements for New and Existing Affected Sources Classified as Large Foundries

As required in §63.10898(c) and (h), you must conduct performance tests according to the test methods and procedures in the following table:

For. . .	You must. . .	According to the following requirements. . .
1. Each metal melting furnace subject to a PM or total metal HAP limit in §63.10895(c)	a. Select sampling port locations and the number of traverse points in each stack or duct using EPA Method 1 or 1A (40 CFR part 60, appendix A) b. Determine volumetric flow rate of the stack gas using Method 2, 2A, 2C, 2D, 2F, or 2G (40 CFR part 60, appendix A) c. Determine dry molecular weight of the stack gas using EPA Method 3, 3A, or 3B (40 CFR part 60, appendix A).[1] d. Measure moisture content of the stack gas using EPA Method 4 (40 CFR part 60, A) e. Determine PM concentration using EPA Method 5, 5B, 5D, 5F, or 5I, as applicable or total metal HAP concentration using EPA Method 29 (40 CFR part 60, appendix A)	Sampling sites must be located at the outlet of the control device (or at the outlet of the emissions source if no control device is present) prior to any releases to the atmosphere. i. Collect a minimum sample volume of 60 dscf of gas during each PM sampling run. The PM concentration is determined using only the front-half (probe rinse and filter) of the PM catch. ii. For Method 29, only the measured concentration of the listed metal HAP analytes that are present at concentrations exceeding one-half the quantification limit of the analytical method are to be used in the sum. If any of the analytes are not detected or are detected at concentrations less than one-half the quantification limit of the analytical method, the concentration of those analytes is assumed to be zero for the purposes of calculating the total metal HAP.
		iii. A minimum of three valid test runs are needed to comprise a PM or total metal HAP performance test.
		iv. For cupola metal melting furnaces, sample PM or total metal HAP only during times when the cupola is on blast.
		v. For electric arc and electric induction metal melting furnaces, sample PM or total metal HAP only during normal melt production conditions,

		which may include, but are not limited to the following operations: Charging, melting, alloying, refining, slagging, and tapping.
		vi. Determine and record the total combined weight of tons of metal charged during the duration of each test run. You must compute the process-weighted mass emissions of PM according to Equation 1 of §63.10898(d) for an individual furnace or Equation 2 of §63.10898(e) for the group of all metal melting furnaces at the foundry.
2. Fugitive emissions from buildings or structures housing any iron and steel foundry emissions sources subject to opacity limit in §63.10895(e)	a. Using a certified observer, conduct each opacity test according to EPA Method 9 (40 CFR part 60, appendix A–4) and 40 CFR 63.6(h)(5)	i. The certified observer may identify a limited number of openings or vents that appear to have the highest opacities and perform opacity observations on the identified openings or vents in lieu of performing observations for each opening or vent from the building or structure. Alternatively, a single opacity observation for the entire building or structure may be performed, if the fugitive release points afford such an observation.
		ii. During testing intervals when PM or total metal HAP performance tests, if applicable, are being conducted, conduct the opacity test such that the opacity observations are recorded during the PM or total metal HAP performance tests.
	b. As alternative to Method 9 performance test, conduct visible emissions test by Method 22 (40 CFR part 60, appendix A–7). The test is successful if no visible emissions are observed for 90 percent of the readings over 1 hour. If VE is observed greater than 10 percent of the time over 1 hour, then the facility must conduct another performance test as soon as possible, but no later than 15 calendar days after the Method 22 test, using Method 9 (40 CFR part 60, appendix A–4)	i. The observer may identify a limited number of openings or vents that appear to have the highest visible emissions and perform observations on the identified openings or vents in lieu of performing observations for each opening or vent from the building or structure. Alternatively, a single observation for the entire building or structure may be performed, if the fugitive release points afford such an observation. ii. During testing intervals when PM or total metal HAP performance tests, if applicable, are being conducted, conduct the visible emissions test such that the observations are recorded during the PM or total metal HAP performance tests.

[1]You may also use as an alternative to EPA Method 3B (40 CFR part 60, appendix A), the manual method for measuring the oxygen, carbon dioxide, and carbon monoxide content of exhaust gas, ANSI/ASME PTC 19.10–1981, “Flue and Exhaust Gas Analyses” (incorporated by reference—see §63.14).

Table 2 to Subpart ZZZZZ of Part 63—Procedures for Establishing Operating Limits for New Affected Sources Classified as Large Foundries

As required in §63.10898(k), you must establish operating limits using the procedures in the following table:

For . . .	You must . . .
1. Each wet scrubber subject to the operating limits in §63.10895(d)(1) for pressure drop and scrubber water flow rate.	Using the CPMS required in §63.10897(b), measure and record the pressure drop and scrubber water flow rate in intervals of no more than 15 minutes during each PM or total metal HAP test run. Compute and record the average pressure drop and average scrubber water flow rate for all the valid sampling runs in which the applicable emissions limit is met.
2. Each electrostatic precipitator subject to operating limits in	Using the CPMS required in §63.10897(c), measure and record voltage and secondary current (or total power input) in intervals of no more than 15 minutes

§63.10895(d)(2) for voltage and secondary current (or total power input).	during each PM or total metal HAP test run. Compute and record the minimum hourly average voltage and secondary current (or total power input) from all the readings for each valid sampling run in which the applicable emissions limit is met.

Table 3 to Subpart ZZZZZ of Part 63—Applicability of General Provisions to New and Existing Affected Sources Classified as Large Foundries

As required in §63.10900(a), you must meet each requirement in the following table that applies to you:

Citation	Subject	Applies to large foundry?	Explanation
63.1	Applicability	Yes.	
63.2	Definitions	Yes.	
63.3	Units and abbreviations	Yes.	
63.4	Prohibited activities	Yes.	
63.5	Construction/reconstruction	Yes.	
63.6(a)–(g)	Compliance with standards and maintenance requirements	Yes.	
63.6(h)	Opacity and visible emissions standards	Yes.	
63.6(i)(i)–(j)	Compliance extension and Presidential compliance exemption	Yes.	
63.7(a)(3), (b)–(h)	Performance testing requirements	Yes.	
63.7(a)(1)–(a)(2)	Applicability and performance test dates	No	Subpart ZZZZZ specifies applicability and performance test dates.
63.8(a)(1)–(a)(3), (b), (c)(1)–(c)(3), (c)(6)–(c)(8), (d), (e), (f)(1)–(f)(6), (g)(1)–(g)(4)	Monitoring requirements	Yes.	
63.8(a)(4)	Additional monitoring requirements for control devices in §63.11	No.	
63.8(c)(4)	Continuous monitoring system (CMS) requirements	No.	
63.8(c)(5)	Continuous opacity monitoring system (COMS) minimum procedures	No.	
63.8(g)(5)	Data reduction	No.	
63.9	Notification requirements	Yes.	
63.10(a), (b)(1)–(b)(2)(xii) –(b)(2)(xiv), (b)(3), (d)(1)–(2), (e)(1)–(2), (f)	Recordkeeping and reporting requirements	Yes.	
63.10(c)(1)–(6), (c)(9)–(15)	Additional records for continuous monitoring systems	No.	
63.10(c)(7)–(8)	Records of excess emissions and parameter monitoring exceedances for CMS	Yes.	
63.10(d)(3)	Reporting opacity or visible emissions observations	Yes.	
63.10(e)(3)	Excess emissions reports	Yes.	

63.10(e)(4)	Reporting COMS data	No.	
63.11	Control device requirements	No.	
63.12	State authority and delegations	Yes.	
63.13–63.16	Addresses of State air pollution control agencies and EPA regional offices. Incorporation by reference. Availability of information and confidentiality. Performance track provisions	Yes.	

Table 4 to Subpart ZZZZZ of Part 63—Compliance Certifications for New and Existing Affected Sources Classified as Large Iron and Steel Foundries

As required by §63.10900(b), your notification of compliance status must include certifications of compliance according to the following table:

For. . .	Your notification of compliance status required by §63.9(h) must include this certification of compliance, signed by a responsible official:
Each new or existing affected source classified as a large foundry and subject to scrap management requirements in §63.10885(a)(1) and/or (2)	"This facility has prepared, and will operate by, written material specifications for metallic scrap according to §63.10885(a)(1)" and/or "This facility has prepared, and will operate by, written material specifications for general iron and steel scrap according to §63.10885(a)(2)."
Each new or existing affected source classified as a large foundry and subject to mercury switch removal requirements in §63.10885(b)	"This facility has prepared, and will operate by, written material specifications for the removal of mercury switches and a site-specific plan implementing the material specifications according to §63.10885(b)(1)" and/or "This facility participates in and purchases motor vehicles scrap only from scrap providers who participate in a program for removal of mercury switches that has been approved by the EPA Administrator according to §63.10885(b)(2) and have prepared a plan for participation in the EPA approved program according to §63.10885(b)(2)(iv)" and/or "The only materials from motor vehicles in the scrap charged to a metal melting furnace at this facility are materials recovered for their specialty alloy content in accordance with §63.10885(b)(3) which are not reasonably expected to contain mercury switches" and/or "This facility complies with the requirements for scrap that does not contain motor vehicle scrap in accordance with §63.10885(b)(4)."
Each new or existing affected source classified as a large foundry and subject to §63.10886	"This facility complies with the no methanol requirement for the catalyst portion of each binder chemical formulation for a furfuryl alcohol warm box mold or core making line according to §63.10886."
Each new or existing affected source classified as a large foundry and subject to §63.10895(b)	"This facility operates a capture and collection system for each emissions source subject to this subpart according to §63.10895(b)."
Each existing affected source classified as a large foundry and subject to §63.10895(c)(1)	"This facility complies with the PM or total metal HAP emissions limit in §63.10895(c) for each metal melting furnace or group of all metal melting furnaces based on a previous performance test in accordance with §63.10898(a)(1)."
Each new or existing affected source classified as a large foundry and subject to §63.10896(a)	"This facility has prepared and will operate by an operation and maintenance plan according to §63.10896(a)."
Each new or existing (if applicable) affected source classified as a large foundry and subject to §63.10897(d)	"This facility has prepared and will operate by a site-specific monitoring plan for each bag leak detection system and submitted the plan to the Administrator for approval according to §63.10897(d)(2)."

Indiana Department of Environmental Management
Office of Air Quality

Addendum to the Technical Support Document (TSD)
for a Part 70 Significant Source Modification and Significant Permit Modification

Source Description and Location

Source Name:	Manchester Metals, LLC
Source Location:	205 Wabash Rd, North Manchester, Indiana 46962
County:	Wabash
SIC Code:	3321, 3325
Operation Permit Renewal No.:	T169-23344-00019
Operation Permit Issuance Date:	September 26, 2007
Significant Source Modification No.:	169-30337-00019
Significant Permit Modification No.:	169-30355-00019
Permit Reviewer:	Heath Hartley

Public Notice Information

On May 2, 2011, the Office of Air Quality (OAQ) had a notice published in the Wabash Plain Dealer in Wabash, Indiana, stating that the Manchester Metals, LLC had applied for a significant modification to their Part 70 Operating Permit Renewal issued on September 26, 2007 add isocure core machines ICM-L10(II) and ICM-L20(II). The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

Other Changes

Upon further review, the OAQ has decided to make the following revisions to the permit:

Change No. 1: The wrong unit was referenced in D.4.6.

D.4.6 HAPs Limit

The annual usage of the ten (10) ~~air set~~ **shell** core machines, identified as ~~ACM~~SCM, shall be limited to 750,000 lbs of Index Material for the shell binder system per twelve (12) consecutive month period, with compliance determined at the end of each month.

.....

Change No. 2: Table of Contents was corrected.

IDEM Contact

Questions regarding this proposed permit can be directed to Heath Hartley at the Indiana Department Environmental Management, Office of Air Quality, MC 61-53, Room 1003, 100 North Senate Avenue, Indianapolis, Indiana 46204-2251 or by telephone at (317) 232-8217 or toll free at 1-800-451-6027 extension 2-8217.

Indiana Department of Environmental Management
Office of Air Quality

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

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Existing Approvals

The source was issued Part 70 Operating Permit Renewal No. T169-23344-00019 on September 26, 2007. The source has since received the following approvals:

(a) Significant Source Modification No. 169-28742-00019, issued on April 6, 2010; and
(b) Significant Permit Modification No. 169-28847-00019 issued on May 13, 2010.

County Attainment Status

The source is located in Wabash County.

Pollutant	Designation
SO_2	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O_3	Unclassifiable or attainment effective June 15, 2004, for the 8-hour ozone standard.[1]
PM_{10}	Unclassifiable effective November 15, 1990.
$PM_{2.5}$	Unclassifiable or attainment effective April 5, 2005
NO_2	Cannot be classified or better than national standards.
Pb	Not designated.
[1]Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005.	

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

(b) $PM_{2.5}$
Wabash County has been classified as attainment for $PM_{2.5}$. On May 8, 2008 U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for $PM_{2.5}$ emissions. These rules became effective on July 15, 2008. Indiana has three years from the publication of these rules to revise its PSD rules, 326 IAC 2-2, to include those requirements. The May 8, 2008 rule revisions require IDEM to regulate PM10 emissions as a surrogate for $PM_{2.5}$ emissions until 326 IAC 2-2 is revised.

(c) Other Criteria Pollutants
Wabash County has been classified as attainment or unclassifiable in Indiana for SO_2, CO, PM_{10}, NO_2 and Pb. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Fugitive Emissions

Since this source is classified as a grey iron and steel foundry, it is considered one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7. Therefore, fugitive emissions are counted toward the determination of PSD, Emission Offset, and Part 70 Permit 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** (ton/yr)
PM	614
PM_{10}	322
SO_2	0.687
VOC	172.8
CO	201
NO_X	21.8

HAPs	**Emissions** (ton/yr)
Chromium	0.136
Cobalt	0.011
Nickel	0.239
Arsenic	0.047
Cadmium	0.022
Selenium	0.004
Lead	1.33
Manganese	0.739
Benzene	5.40
Dichlorobenzene	< 0.001
Formaldehyde	2.348
Hexane	0.090
Toluene	1.75
MDI	0
Methanol	0.015
Phenol	2.51
Acrolein	0.034
Hydrogen Cyanide	5.86
Xylenes	0.660
Naphthalene	0.038

HAPs	**Emissions** (ton/yr)
Glycol Ether	0
Total Aromatic Amines	1.43
Total C2 and C5 Aldehydes	0.500
Total	**23.0**

(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 Part 70 Operating Permit Renewal No. T 169-23344-00019, issued September 26, 2007.

(c) This existing source is not a major source of HAPs, as defined in 40 CFR 63.2, 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 Manchester Metals on March 11, 2011, relating to the addition of two isocure core machines. The following is a list of the proposed emission units and pollution control device:

(a) One (1) isocure core machine, identified as ICM-L10(II), approved in 2011 for construction, maximum capacity: 1.5 ton of sand per hour, 24 pounds of resin per hour, and 2.1 pounds of catalyst (Dimethylethylamine) per hour, with catalyst emissions controlled by a fume scrubber, exhausting through stack S8.

(b) One (1) isocure core machine, identified as ICM-L20(II), approved in 2011 for construction, maximum capacity: 1.5 ton of sand per hour, 24 pounds of resin per hour, and 2.1 pounds of catalyst (Dimethylethylamine) per hour, with catalyst emissions controlled by a fume scrubber, exhausting through stack LA2.

Enforcement Issues

There are no pending enforcement actions related to this modification.

Emission Calculations

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

Permit Level Determination – Part 70

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

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

Increase in PTE Before Controls of the Modification	
Pollutant	**Potential To Emit** (ton/yr)
PM	14.45
PM_{10}	14.45
SO_2	0
VOC	59.1
CO	0
NO_X	0
Single HAPs	1.2
Total HAPs	2.7

(a) Appendix A of this TSD reflects the unrestricted potential emissions of the modification.

(b) This significant source modification is subject to 326 IAC 2-7-10.5(f)(4) because the PTE of VOC is greater than 25 tons/yr before control. Additionally, the modification will be incorporated into the Part 70 Operating Permit through a significant permit modification issued pursuant to 326 IAC 2-7-12(b)(1)(C)(i) because it requires a case-by-case determination of an emission limitation.

Permit Level Determination – PSD or Emission Offset or Nonattainment NSR

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

	Potential to Emit (ton/yr)					
Process / Emission Unit	**PM**	**PM_{10}**	**SO_2**	**VOC**	**CO**	**NO_X**
ICM-L10 (SSM 169-28742-00019)	7.2	4.97	0	13.3	0	0
ICM-L10(II)	7.2	4.97	0	13.3	0	0
ICM-L20(II)	7.2	4.97	0	13.3	0	0
Total for Modification	21.6	14.9	0	39.9	0	0
Significant Level	25	15	40	40	100	40

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

(a) The following conditions shall apply to the isocure core machines, identified as ICM-L10, ICM-L10(II) and ICM-L20(II):

(1) The resin usage for the isocure core machines ICM-L10, ICM-L10(II) and ICM-L20(II) shall each be less than 149,629 pounds of resin per twelve (12) consecutive month period, with compliance determined at the end of each month, and the total catalyst usage shall each not exceed 13,200 pounds per twelve (12) consecutive month period, with compliance determined at the end of each month.

(2) The VOC emissions (not including catalyst) from the isocure core machines, identified as ICM-L10, ICM-L10(II) and ICM-L20(II) shall each not exceed 0.09 pound per pound of resin.

(3) The total sand throughput to the three isocure core machines, identified as ICM-L10, ICM-L10(II), ICM-L20(II), shall be less than 27,090 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

(4) The PM_{10} emissions shall not exceed the pound per ton limits below:

Emission Unit	PM_{10} Emission Limit (lb/ton)
ICM-L10	1.10
ICM-L10(II)	1.10
ICM-L20(II)	1.10

Compliance with these limits restricts the VOC to less than forty (40) tons per twelve (12) consecutive month period and PM_{10} to less than fifteen (15) tons per twelve (12) consecutive month period and renders the requirements of 326 IAC 2-2 not applicable to 169-28742-00019 and SSM 169-30337-00019.

Federal Rule Applicability Determination

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

NSPS:

(a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) included in this proposed modification.

NESHAP:

(b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in 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 Part 70 major source threshold for the pollutant involved;

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

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

The addition of the two isocure core machines have PTE less than major source thresholds; therefore, the requirements of 40 CFR Part 64, CAM, are not applicable to the new units as part of this modification.

State Rule Applicability Determination

The following state rules are applicable to the source due to the modification:

326 IAC 2-2 (PSD)

PSD applicability is discussed under the Permit Level Determination – PSD.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The operation of isocure machines ICM-L10(II) and ICM-L20(II) will each emit less than ten (10) tons per year for a single HAP and less than twenty-five (25) tons per year for a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

Since the addition of the two isocure machines have the potential to increase total HAPs at the source to greater than 25 tons per year, the source is taking a limit to keep total HAPs to less than major source levels.

The binder for the ten (10) shell core making machines, seven (7) constructed in 1981 and three (3) constructed in 2005, identified as SCM, shall be limited to less than 750,000 lbs of Index Material for the shell binder system per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with this binder throughput limit restricts total HAPs emissions from the source to less than twenty-five (25) tons per twelve (12) consecutive month period and keeps the source as an Area Source for HAPs.

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the isocure core machines, ICM-L10(II) and ICM-L20(II) shall each not exceed 5.4 pounds per hour when operating at a process weight rate of 1.5 tons per hour. The pound per hour limitation was calculated with the following equation:

(a) 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

Since the unrestricted potential to emit PM from each of these machines is 1.65 pounds per hour, the isocure core machines are capable of complying with this rule.

326 IAC 8-1-6 (New facilities; General reduction requirements)
(a) In order to render the requirements of 326 IAC 8-1-6 (New facilities; General reduction requirements) not applicable, the following conditions shall apply to the isocure core machines, identified as ICM-L10(II) and ICM-L20(II), approved in 2011 for construction:

(1) The resin usage for the isocure core machine shall not exceed 260,000 pounds of resin per twelve (12) consecutive month period with compliance determined at the end of each month.

(2) Total DMEA usage for the isocure process shall not exceed 26,000 pounds of catalyst per twelve (12) consecutive month period, with compliance determined at the end of each month.

(3) The VOC emissions (not including catalyst) from the isocure core machine shall not exceed 0.09 pound per pound of resin.

Compliance with these limits will limit the VOC emissions to less than twenty-five (25) tons per year from the isocure core machines ICM-L10(II) and ICM-L20(II) and render 326 IAC 8-1-6 not applicable to this modification.

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 new Compliance Determination Requirements or Compliance Monitoring Requirements applicable to this modification.

Proposed Changes

The changes listed below have been made to Part 70 Operating Permit No. T169-23344-00019. Deleted language appears as ~~strikethroughs~~ and new language appears in **bold**:

Change 1: Sections A.2 and D.4 have been modified to add the isocure core machine. Also, there are additional limits taken to keep the modification to less than PSD major modification levels:

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:

.....

(e) Sand handling, core making and molding making processes consisting of the following emission units and pollution control devices:

.....

(3) The following South isocure core making processes:

.....

(C) One (1) isocure core machine, approved in 2011 for construction, identified as ICM-L20(II), maximum capacity: 1.5 ton of sand per hour, 24 pounds of resin per hour, and 2.1 pounds of catalyst (Dimethylethylamine) per hour, with catalyst emissions controlled by a voluntary fume scrubber, exhausting through stack LA2.

.....

SECTION D.4 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Sand Handling, Core Making and Mold Making
(e) Sand handling, core making and molding making processes consisting of the following emission units and pollution control devices:

.....

(3) The following South isocure core making processes:

.....

(C) One (1) isocure core machine, approved in 2011 for construction, identified as ICM-L20(II), maximum capacity: 1.5 ton of sand per hour, 24 pounds of resin per hour, and 2.1 pounds of catalyst (Dimethylethylamine) per hour, with catalyst emissions controlled by a voluntary fume scrubber, exhausting through stack LA2.

.....

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

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

.....

(f) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the isocure core machines, identified as ICM-L10, ~~and~~ ICM-L20, **ICM-L10(II) and ICM-L20(II)** shall each not exceed 5.4 pounds per hour each, when operating at a process weight rate of 1.5 tons of sand per hour for each core machine.

.....

D.4.3 PSD Minor Limit [326 IAC 2-2]

~~(a)~~ Pursuant to Significant Source Modification No. 169-28742-00019, Significant Source Modification No. 169-23066-00019, and in order to render the requirements of 326 IAC 2-2 not applicable, the Permittee shall comply with the following:

.....

D.4.4~~2~~ PSD Minor Limit [326 IAC 2-2]

The following conditions shall apply to the isocure core machines, identified as ICM-L10, ICM-L10(II) and ICM-L20(II):

(a) The resin usage for the isocure core machines ICM-L10, ICM-L10(II) and ICM-L20(II) shall be less than 149,629 pounds of resin per twelve (12) consecutive month period, with compliance determined at the end of each month, and the total catalyst usage shall each not exceed 13,200 pounds per twelve (12) consecutive month period, with compliance determined at the end of each month.

(b) The VOC emissions (not including catalyst) from the isocure core machines, identified as ICM-L10, ICM-L10(II) and ICM-L20(II) shall each not exceed 0.09 pound per pound of resin.

(c) The total sand throughput to the three isocure core machines, identified as ICM-L10, ICM-L10(II), ICM-L20(II), shall be less than 27,270 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

(d) The PM_{10} emissions shall not exceed the pound per ton limits below:

Emission Unit	PM_{10} Emission Limit (lb/ton)
ICM-L10	**1.10**
ICM-L10(II)	**1.10**
ICM-L20(II)	**1.10**

Compliance with these limits restricts the VOC to less than forty (40) tons per twelve (12) consecutive month period and PM_{10} to less than fifteen (15) tons per twelve (12) consecutive month period and renders the requirements of 326 IAC 2-2 not applicable to 169-28742-00019 and SSM 169-30337-00019.

D.4.~~3~~**5** Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

(a) Pursuant to Significant Source Modification No. 169-28742-00019, in order to render the requirements of 326 IAC 8-1-6 (New facilities; General reduction requirements) not applicable, the following conditions shall apply to the one (1) isocure core machine, identified as ICM-L10, approved in 2010 for construction:

(1) The resin usage for the isocure core machine shall not exceed ~~255,500~~**266,666** pounds of resin per twelve (12) consecutive month period with compliance determined at the end of each month.

(2) Total DMEA usage for the isocure process shall not exceed ~~25,500~~**26,000** pounds of DMEA per twelve (12) consecutive month period, with compliance determined at the end of each month.

(3) The VOC emissions (not including catalyst) from the isocure core machine shall not exceed ~~0.05~~**0.09** pound per pound of resin before controls.

.....

(c) In order to render the requirements of 326 IAC 8-1-6 (New facilities; General reduction requirements) not applicable, the following conditions shall apply to the two isocure core machines, identified as ICM-L10(II) and ICM-L20(II):

(1) The resin usage for each isocure core machine shall not exceed 266,666 pounds of resin per twelve (12) consecutive month period, with compliance determined at the end of each month, and the total catalyst usage shall not exceed 26,000 pounds per twelve (12) consecutive month period, with compliance determined at the end of each month.

(2) The VOC emissions (not including catalyst) from each isocure core machine shall not exceed 0.09 pound per pound of resin.

D.4.~~4~~6 HAPs Limit

The annual usage of the ten (10) air set core machines, identified as ACM, shall be limited to 750,000 lbs of Index Material for the shell binder system per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with this limit, along with the other source HAPs, will limit the total HAPs emissions from the source to less than 25 tons per 12 consecutive month period and render the source an Area Source of HAPs.

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D.4.~~6~~**8** Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

~~On or before May 3, 2010,~~ In order to demonstrate compliance with Condition D.4.1(a) and D.4.2(a), the Permittee shall perform PM and PM_{10} testing for the mold sand handling operations (MSH), exhausting to baghouse DC3, utilizing methods as approved by the Commissioner **at least once every five (5) years from the date of the most recent valid compliance demonstration.** PM_{10} includes filterable and condensible PM_{10}. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

D.4.~~12~~**13** Record Keeping Requirements

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(b) To document the compliance status with Condition D.4.3, the Permittee shall maintain records of the catalyst and resin usage at each of the isocure core machines, identified as ICM-L10, ICM-L10(II), ~~and~~ ICM-L20 **and ICM-L20(II)**, for each month.

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

Part 70 Quarterly Report

Source Name: **Manchester Metals, LLC**
Source Address: **205 Wabash Road, North Manchester, Indiana 46962**
Part 70 Permit No.: **T 169-23344-00019**
Facility: **Isocure core machines, identified as ICM-L10, ICM-L10(II) & ICM-L20(II)**
Parameter: **Sand throughput**
Limit: **Less than 27,090 tons of sand per twelve (12) consecutive month period, with compliance determined at the end of each month.**

QUARTER : _____ YEAR: _____

Month	Sand Usage (tons)			Sand Usage (tons)			Sand Usage (tons)
	This Month			Previous 11 Months			12 Month Total
	ICM-L10	ICM-L10(II)	ICM-L20(II)	ICM-L10	ICM-L10(II)	ICM-L20(II)	

☐ **No deviation occurred in this quarter.**

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

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

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

Part 70 Quarterly Report

Source Name: Manchester Metals, LLC
Source Address: 205 Wabash Road, North Manchester, Indiana 46962
Part 70 Permit No.: T 169-23344-00019
Facility: One (1) isocure core machine, identified as ICM-L10
Parameter: Resin usage
Limit: Less than 149,629 pounds per consecutive twelve (12) month period, with compliance determined at the end of each month.

QUARTER : _____ **YEAR:** _____

Month	Resin Usage (lbs)	Resin Usage (lbs)	Resin Usage (lbs)
	This Month	Previous 11 Months	12 Month Total

☐ **No deviation occurred in this quarter.**

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

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone:

.....

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

Part 70 Quarterly Report

Source Name: **Manchester Metals, LLC**
Source Address: **205 Wabash Road, North Manchester, Indiana 46962**
Part 70 Permit No.: **T 169-23344-00019**
Facility: **One (1) isocure core machine, identified as ICM-L10**
Parameter: **Catalyst usage**
Limit: **Less than 33,000 pounds per consecutive twelve (12) month period, with compliance determined at the end of each month.**

QUARTER : _____ **YEAR:** _____

Month	Catalyst Usage (lbs)	Catalyst Usage (lbs)	Catalyst Usage (lbs)
	This Month	Previous 11 Months	12 Month Total

☐ **No deviation occurred in this quarter.**

☐ **Deviation/s occurred in this quarter.**

Deviation has been reported on: _____

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

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INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: **Manchester Metals, LLC**
Source Address: **205 Wabash Road, North Manchester, Indiana 46962**
Part 70 Permit No.: **T 169-23344-00019**
Facility: **One (1) isocure core machine, identified as ICM-L10(II)**
Parameter: **Resin usage**
Limit: **Less than 149,629 pounds per consecutive twelve (12) month period, with compliance determined at the end of each month.**

QUARTER : _____ YEAR: _____

Month	Resin Usage (lbs)	Resin Usage (lbs)	Resin Usage (lbs)
	This Month	Previous 11 Months	12 Month Total

☐ **No deviation occurred in this quarter.**

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

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone:

.....

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

Part 70 Quarterly Report

Source Name: **Manchester Metals, LLC**
Source Address: **205 Wabash Road, North Manchester, Indiana 46962**
Part 70 Permit No.: **T 169-23344-00019**
Facility: **One (1) isocure core machine, identified as ICM-L10(II)**

Parameter: **Catalyst usage**
Limit: **Less than 13,200 pounds per consecutive twelve (12) month period, with compliance determined at the end of each month.**

QUARTER : _____ YEAR: _____

Month	Catalyst Usage (lbs)	Catalyst Usage (lbs)	Catalyst Usage (lbs)
	This Month	Previous 11 Months	12 Month Total

☐ **No deviation occurred in this quarter.**

☐ **Deviation/s occurred in this quarter.**

Deviation has been reported on: _____

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

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

Part 70 Quarterly Report

Source Name: **Manchester Metals, LLC**
Source Address: **205 Wabash Road, North Manchester, Indiana 46962**
Part 70 Permit No.: **T 169-23344-00019**
Facility: **One (1) isocure core machine, identified as ICM-L20(II)**
Parameter: **Resin usage**
Limit: **Less than 149,629 pounds per consecutive twelve (12) month period, with compliance determined at the end of each month.**

QUARTER : _____ YEAR: _____

Month	Resin Usage (lbs)	Resin Usage (lbs)	Resin Usage (lbs)
	This Month	Previous 11 Months	12 Month Total

☐ **No deviation occurred in this quarter.**

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

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone:

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

Part 70 Quarterly Report

Source Name: Manchester Metals, LLC
Source Address: 205 Wabash Road, North Manchester, Indiana 46962
Part 70 Permit No.: T 169-23344-00019
Facility: One (1) isocure core machine, identified as ICM-L20(II)
Parameter: Catalyst usage
Limit: Less than 13,200 pounds per consecutive twelve (12) month period, with compliance determined at the end of each month.

QUARTER : _____ YEAR: _____

Month	Catalyst Usage (lbs)	Catalyst Usage (lbs)	Catalyst Usage (lbs)
	This Month	Previous 11 Months	12 Month Total

☐ **No deviation occurred in this quarter.**

☐ **Deviation/s occurred in this quarter.**

Deviation has been reported on: _____

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

.....

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

Part 70 Quarterly Report

Source Name: Manchester Metals, LLC
Source Address: 205 Wabash Road, North Manchester, Indiana 46962
Part 70 Permit No.: T 169-23344-00019
Facility: Ten (10) air set core machines, identified as ACM
Parameter: Index Material for the shell binder system
Limit: Less than 750,000 pounds per consecutive twelve (12) month period, with compliance determined at the end of each month.

QUARTER : _____ **YEAR:** _____

Month	Binder Usage (lbs)	Binder Usage (lbs)	Binder Usage (lbs)
	This Month	Previous 11 Months	12 Month Total

☐ **No deviation occurred in this quarter.**

☐ **Deviation/s occurred in this quarter.**

Deviation has been reported on: _____

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

Change 2: Since the fume scrubbers are not required for units ICM-L10, ICM-L20, ICM-L10(II) and ICM-L20(II), the word "voluntary" is added to any reference of the fume scrubber .

Conclusion and Recommendation

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Source Modification No. 169-30337-00019 and Significant Permit Modification 169-30355-00019. The staff recommend to the Commissioner that this Part 70 Significant Source and Significant Permit Modification be approved.

IDEM Contact

(a) Questions regarding this proposed permit can be directed to Heath Hartley at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 232-8217 or toll free at 1-800-451-6027 extension 232-8217.

(b) A copy of the findings is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/

(c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.idem.in.gov

Appendix A: Emissions Calculations

Emissions Summary Sheet

Company Name: Manchester Metals, LLC
Address City IN Zip: 205 Wabash Road, North Manchester, Indiana 46962
Significant Source Modification No.: 169-30337-00019
Significant Permit Modification No.: 169-30355-00019
Reviewer: Heath Hartley
Application Date: 11-Mar-2011

Uncontrolled PTE

Emission Unit	PM	PM_{10}	SO_2	NOx	VOC	CO	Single HAP	Total HAP
ICM-L10(II)	7.23	7.23	0	0	29.57	0	0.59	1.35
ICM-L20(II)	7.23	7.23	0	0	29.57	0	0.59	1.35
ICM-L10*	7.23	7.23	0	0	29.57	0	0.59	1.35
Total	21.7	21.7	0	0	88.7	0	1.8	4.1

Limited PTE

Emission Unit	PM	PM_{10}	SO_2	NOx	VOC	CO	Single HAP	Total HAP
ICM-L10(II)	7.23	5.00	0	0	13.33	0	0.59	1.35
ICM-L20(II)	7.23	5.00	0	0	13.33	0	0.59	1.35
ICM-L10*	7.23	5.00	0	0	13.33	0	0.59	1.35
Total	21.7	15.0	0	0	40.0	0	1.8	4.1

*Previously permitted in 169-28847-00019

Appendix A: Emission Calculations
Isocure Core Machines
PM and PM10

Company Name: Manchester Metals, LLC
Address City IN Zip: 205 Wabash Road, North Manchester, Indiana 46962
Significant Source Modification No.: 169-30337-00019
Significant Permit Modification No.: 169-30355-00019
Reviewer: Heath Hartley
Application Date: March 11, 2011

	Uncontrolled		
Emission Unit ID #	Capacity (tons/hr)	PM/PM_{10} Emissions Factor (lbs/ton)	Potential PM/PM_{10} (tons/yr)
ICM-L10(II)	1.50	1.10	7.23
ICM-L20(II)	1.50	1.10	7.23
Total:			**14.45**

To avoid 326 IAC 2-2:

		Uncontrolled			Limited		
Emission Unit ID #	Year Permitted	Capacity (tons/hr)	PM/PM_{10} Emissions Factor (lbs/ton)	Potential PM/PM_{10} (tons/yr)	Capacity (tons/yr)	Capacity (tons/hr)	Limited PM_{10} Emissions (tons/yr)
ICM-L10	2010	1.50	1.10	7.23	9090	1.038	5.00
ICM-L10(II)	2011	1.50	1.10	7.23	9090	1.038	5.00
ICM-L20(II)	2011	1.50	1.10	7.23	9090	1.038	5.00
Total:				21.68			**15.0**

Methodology
Emission factors from AP-42 Chapter 12.10, Table 12.10-7 for core making.
Potential Emissions (tons/yr) = Throughput (tons/hr) x Emission Factor (lbs/ton) x 8760 (hrs/yr) x (1 ton/2000 lbs)

Appendix A: Emission Calculations
Isocure Core Machines - VOCs

Company Name: Manchester Metals, LLC
Address City IN Zip: 205 Wabash Road, North Manchester, Indiana 46962
Significant Source Modification No.: 169-30337-00019
Significant Permit Modification No.: 169-30355-00019
Reviewer: Heath Hartley
Application Date: March 11, 2011

Potential Emissions based on resin and catalyst usage

Emission Unit	Year Permitted	Capacity (tons cores/hr)	Maximum Resin Content (%)	VOC Emission Factor from Resin Evaporation (lb/ton cores)	Max Catalyst Usage (lb Catalyst/ton cores) Catalyst does not contain HAPs	Potential VOC Emissions from resin evap (tons/yr)	Potential VOC Emissions from Catalyst usage (tons/yr)	Total VOC PTE (tons/yr)
ICM-L10 (II)	2011	1.5	0.8%	1.5	3.00	9.86	19.71	29.6
ICM-L20 (II)	2011	1.5	0.8%	1.5	3.00	9.86	19.71	29.6
						Total PTE for New Units		**59.1**

Limits Necessary to render 326 IAC 8-1-6 (BACT) not applicable:

Core Machines	Year Permitted	Resin usage limit (lbs/yr)	Resin Emission Factor (lb VOC/lb Resin)	Resin VOC PTE (tons/yr) unlimited	Catalyst usage limit (lbs/yr)	Catalyst Emission Factor (lb VOC/lb Cat)	Catalyst VOC PTE (tons/yr)	VOC PTE (tons/yr)
ICM-L10 (II)	2011	266,666	0.09	12.00	26,000	1.00	13.00	25.0
ICM-L20 (II)	2011	266,666	0.09	12.00	26,000	1.00	13.00	25.0
						Total PTE for New Units		**50.0**

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

Core Machines	Year Permitted	Resin usage limit (lbs/yr)	Resin Emission Factor (lb VOC/lb Resin)	Resin VOC PTE (tons/yr) unlimited	Catalyst usage limit (lbs/yr)	Catalyst Emission Factor (lb VOC/lb Cat)	Catalyst VOC PTE (tons/yr)	VOC PTE (tons/yr)
ICM-L10	2010	149,629	0.09	6.73	13,200	1.00	6.60	13.33
ICM-L10 (II)	2011	149,629	0.09	6.73	13,200	1.00	6.60	13.33
ICM-L20 (II)	2011	149,629	0.09	6.73	13,200	1.00	6.60	13.33
						Total PTE for New Units		**40.0**

Methodology

Emission factors based on OCMA study.
Conservative estimate of uncontrolled emissions so that no stack test would be necessary to verify emissions.
Potential VOC Emissions from Resin (tons/yr)= Capacity (tons of cores/yr) x Emission Factor (lbs of resin/ton of cores) x 8760 (hrs/yr) / 2000 (lbs/ton)
Potential VOC Emissions from Catalyst (tons/yr) = Capacity (tons of cores/yr) x Maximum Catalyst Usage (lbs of catalyst/ton of cores) x 8760 (hrs/yr) / 2000 (lbs/ton)
Total VOC Emissions (tons/yr) = VOC Emissions from resin (tons/yr) + VOC Emissions from Catalyst (tons/yr)

Appendix A: Emission Calculations
Isocure Core Machine - HAPs

Company Name: Manchester Metals, LLC
Address City IN Zip: 205 Wabash Road, North Manchester, Indiana 46962
Significant Source Modification No.: 169-30337-00019
Significant Permit Modification No.: 169-30355-00019
Reviewer: Heath Hartley
Application Date: March 11, 2011

Emissions for each ICM-L10(II) & ICM-L20(II)

Material	Maximum Limited Resin Use (lbs/yr)	Weight % MDI (%)	MDI Emissions (lbs/yr)	Weight % Phenol (%)	Phenol Emissions (lbs/yr)	Total HAPS
Biocure 703 UCB Part 1	50,000			5%	2,500	2,500
Biocure 302 UCB Part 2	40,000	50%	20,000			20,000
Material and Ingredient Totals (lbs)	90,000		20,000		2,500	22,500
Portion Reacted During Use (%)		99.99%	19,998	90%	2,250	22,248
Portion Remaining in Core (%)		0.01%	2	10%	250	252
Portion Evaporated (%)						0
Potential to Emit (lbs/yr)						0
Potential to Emit (tons/yr)						**0**

Note: The isocure catalyst contains no hazardous air pollutants.

Methodology

Maximum Potential Resin Use (lbs/hr) = Maximum Sand Use Rate (lbs/hr) x Resin Concentration Percentage (%) x Resin Fraction Percentage (%)
Maximum Potential Resin Use (lbs/yr) = Maximum Potential Resin Use (lbs/hr) x 8760 (hrs/yr)
Single HAP Emissions (lbs/yr) = Maximum Potential Resin Use (lbs/yr) x Weight Percentage Single HAP (%) X Percent Resin Evaporated (%)
Single HAP Emissions (tons/yr) = Single HAP Emissions (lbs/yr) / 2000 (lbs/ton)
Total HAP Emissions (tons/yr) = Sum of Single HAP Emissions (lbs/yr) for Part 1 Resin and Part 2 Resin

Appendix A: Emission Calculations
Pouring - Cooling - Shakeout based on Binder Systems HAPs

Company Name: Manchester Metals, LLC
Address City IN Zip: 205 Wabash Road, North Manchester, Indiana 46962
Significant Source Modification No.: 169-30337-00019
Significant Permit Modification No.: 169-30355-00019
Reviewer: Heath Hartley
Application Date: March 11, 2011

Non-metal HAP Emissions from Pouring, Cooling and Shakeout due to ten (10) shell core making machines

Annual Usage of Index Material (lbs/yr)	Binder System
750,000	shell

Pollutant	Binder System Type Emission Factors => Lbs. of Chemical Released to Air per Lbs. of Index											***	
	Phenolic Nobake (Resin)	Phenolic Urethane (Resin)	Phenolic Hotbox (Resin)	Green Sand (Seacoal)	Core Oil (Core Oil)	Shell (Resin)	Low Nitrogen Furan (Resin)	Med Nitrogen Furan TSA Catalyst (Resin)	Furan Hotbox (Resin)	Alkyd Isocyanate (Resin & Isocyanate)	Sodium Sili-cate & Ester (Sugar & Ester)	Pollutant Emissions (lbs/yr)	Pollutant Emissions (tons/yr)
Acrolein	0.000005	0.000031	0.000009	0.000002	0.000077	0.000047	0.000028	0.000016	0.000013	0.000088	0.000028	35.250	0.018
Benzene	0.011209	0.005351	0.001002	0.000611	0.002344	0.006667	0.000648	0.004534	0.000537	0.005336	0.001410	5000.250	2.500
Formaldehyde	0.000010	0.000022	0.000006	0.000004	0.000096	0.000035	0.000267	0.000065	0.000009	0.000106	0.000169	26.250	0.013
Hydrogen Cyanide	0.000029	0.001053	0.001184	0.000118	0.000086	0.010526	0.000368	0.000607	0.003474	0.000175	0.000179	7894.500	3.947
M-Xylene	0.000097	0.000439	0.000121	0.000021	0.000239	0.000585	0.002227	0.000243	0.000032	0.002522	0.000094	438.750	0.219
Napthalene	0.000049	0.000022	0.000030	0.000021	0.000048	0.000058	0.000040	0.000040	0.000032	0.000037	0.000005	43.500	0.022
O-Xylene	0.000049	0.000132	0.000030	0.000021	0.000287	0.000117	0.000729	0.000040	0.000032	0.003838	0.000094	87.750	0.044
Phenol	0.000975	0.003904	0.000203	0.000131	0.000057	0.002456	0.000024	0.000101	0.000016	0.000110	0.000273	1842.000	0.921
Toluene	0.000634	0.000833	0.000182	0.000063	0.000478	0.002807	0.000210	0.008826	0.000032	0.001535	0.000282	2105.250	1.053
Total Aromatic Amines	0.000049	0.000351	0.001275	0.000021	0.000096	0.002339	0.000081	0.000364	0.003032	0.000037	0.000094	1754.250	0.877
Total C2 to C5 Aldehydes	0.003070	0.000219	0.000273	0.000063	0.000766	0.000585	0.000243	0.017004	0.000158	0.002156	0.001316	438.750	0.219
Total HAPs	0.016174	0.012355	0.004318	0.001076	0.004574	0.026222	0.004777	0.031842	0.007364	0.015939	0.003943	19666.500	9.833

Non-metal HAP Emissions from Pouring, Cooling and Shakeout due to one (1) air set core machine

Annual Usage of Index Material (lbs/yr)	Binder System Isocure
45640	Phenolic Urethane

Pollutant	Binder System Type Emission Factors => Lbs. of Chemical Released to Air per Lbs. of Index											***	
	Phenolic Nobake (Resin)	Phenolic Urethane (Resin)	Phenolic Hotbox (Resin)	Green Sand (Seacoal)	Core Oil (Core Oil)	Shell (Resin)	Low Nitrogen Furan (Resin)	Med Nitrogen Furan TSA Catalyst (Resin)	Furan Hotbox (Resin)	Alkyd Isocyanate (Resin & Isocyanate)	Sodium Sili-cate & Ester (Sugar & Ester)	Pollutant Emissions (lbs/yr)	Pollutant Emissions (tons/yr)
Acrolein	0.000005	0.000031	0.000009	0.000002	0.000077	0.000047	0.000028	0.000016	0.000013	0.000088	0.000028	0.228	0.000
Benzene	0.011209	0.005351	0.001002	0.000611	0.002344	0.006667	0.000648	0.004534	0.000537	0.005336	0.001410	511.574	0.256
Formaldehyde	0.000010	0.000022	0.000006	0.000004	0.000096	0.000035	0.000267	0.000065	0.000009	0.000106	0.000169	0.456	0.000
Hydrogen Cyanide	0.000029	0.001053	0.001184	0.000118	0.000086	0.010526	0.000368	0.000607	0.003474	0.000175	0.000179	1.324	0.001
M-Xylene	0.000097	0.000439	0.000121	0.000021	0.000239	0.000585	0.002227	0.000243	0.000032	0.002522	0.000094	4.427	0.002
Napthalene	0.000049	0.000022	0.000030	0.000021	0.000048	0.000058	0.000040	0.000040	0.000032	0.000037	0.000005	2.236	0.001
O-Xylene	0.000049	0.000132	0.000030	0.000021	0.000287	0.000117	0.000729	0.000040	0.000032	0.003838	0.000094	2.236	0.001
Phenol	0.000975	0.003904	0.000203	0.000131	0.000057	0.002456	0.000024	0.000101	0.000016	0.000110	0.000273	44.499	0.022
Toluene	0.000634	0.000833	0.000182	0.000063	0.000478	0.002807	0.000210	0.008826	0.000032	0.001535	0.000282	28.936	0.014
Total Aromatic Amines	0.000049	0.000351	0.001275	0.000021	0.000096	0.002339	0.000081	0.000364	0.003032	0.000037	0.000094	2.236	0.001
Total C2 to C5 Aldehydes	0.003070	0.000219	0.000273	0.000063	0.000766	0.000585	0.000243	0.017004	0.000158	0.002156	0.001316	140.114	0.070
Total HAPs	0.016174	0.012355	0.004318	0.001076	0.004574	0.026222	0.004777	0.031842	0.007364	0.015939	0.003943	738.175	0.369

METHODOLOGY
HAPS emission rate (tons/yr) = Annual Usage (lbs/yr) * Emission Factor (lbs Chemical/lbs Index) * 1 ton/2000 lbs

Appendix A: Emission Calculations
Pouring - Cooling - Shakeout based on Binder Systems HAPs

Company Name: Manchester Metals, LLC
Address City IN Zip: 205 Wabash Road, North Manchester, Indiana 46962
Significant Source Modification No.: 169-30337-00019
Significant Permit Modification No.: 169-30355-00019
Reviewer: Heath Hartley
Application Date: March 11, 2011

Non-metal HAP Emissions from Pouring, Cooling and Shakeout due to one (1) isocure machine (ICM-L10)

Annual Usage of Index Material (lbs/yr)	Binder System Isocure
219000	Phenolic Urethane

Pollutant	Binder System Type Emission Factors => Lbs. of Chemical Released to Air per Lbs. of Index											***	
	Phenolic Nobake (Resin)	Phenolic Urethane (Resin)	Phenolic Hotbox (Resin)	Green Sand (Seacoal)	Core Oil (Core Oil)	Shell (Resin)	Low Nitrogen Furan (Resin)	Med Nitrogen Furan TSA Catalyst (Resin)	Furan Hotbox (Resin)	Alkyd Isocyanate (Resin & Isocyanate)	Sodium Silicate & Ester (Sugar & Ester)	Pollutant Emissions (lbs/yr)	Pollutant Emissions (tons/yr)
Acrolein	0.000005	0.000031	0.000009	0.000002	0.000077	0.000047	0.000028	0.000016	0.000013	0.000088	0.000028	6.789	0.003
Benzene	0.011209	0.005351	0.001002	0.000611	0.002344	0.006667	0.000648	0.004534	0.000537	0.005336	0.001410	1171.869	0.586
Formaldehyde	0.000010	0.000022	0.000006	0.000004	0.000096	0.000035	0.000267	0.000065	0.000009	0.000106	0.000169	4.818	0.002
Hydrogen Cyanide	0.000029	0.001053	0.001184	0.000118	0.000086	0.010526	0.000368	0.000607	0.003474	0.000175	0.000179	230.607	0.115
M-Xylene	0.000097	0.000439	0.000121	0.000021	0.000239	0.000585	0.002227	0.000243	0.000032	0.002522	0.000094	96.141	0.048
Napthalene	0.000049	0.000022	0.000030	0.000021	0.000048	0.000058	0.000040	0.000040	0.000032	0.000037	0.000005	4.818	0.002
O-Xylene	0.000049	0.000132	0.000030	0.000021	0.000287	0.000117	0.000729	0.000040	0.000032	0.003838	0.000094	28.908	0.014
Phenol	0.000975	0.003904	0.000203	0.000131	0.000057	0.002456	0.000024	0.000101	0.000016	0.000110	0.000273	854.976	0.427
Toluene	0.000634	0.000833	0.000182	0.000063	0.000478	0.002807	0.000210	0.008826	0.000032	0.001535	0.000282	182.427	0.091
Total Aromatic Amines	0.000049	0.000351	0.001275	0.000021	0.000096	0.002339	0.000081	0.000364	0.003032	0.000037	0.000094	76.869	0.038
Total C2 to C5 Aldehydes	0.003070	0.000219	0.000273	0.000063	0.000766	0.000585	0.000243	0.017004	0.000158	0.002156	0.001316	47.961	0.024
Total HAPs	0.016174	0.012355	0.004318	0.001076	0.004574	0.026222	0.004777	0.031842	0.007364	0.015939	0.003943	2705.745	1.353

Non-metal HAP Emissions from Pouring, Cooling and Shakeout due to one (1) isocure core machine (ICM-L20)

Annual Usage of Index Material (lbs/yr)	Binder System Isocure
394200	Phenolic Urethane

Pollutant	Binder System Type Emission Factors => Lbs. of Chemical Released to Air per Lbs. of Index											***	
	Phenolic Nobake (Resin)	Phenolic Urethane (Resin)	Phenolic Hotbox (Resin)	Green Sand (Seacoal)	Core Oil (Core Oil)	Shell (Resin)	Low Nitrogen Furan (Resin)	Med Nitrogen Furan TSA Catalyst (Resin)	Furan Hotbox (Resin)	Alkyd Isocyanate (Resin & Isocyanate)	Sodium Silicate & Ester (Sugar & Ester)	Pollutant Emissions (lbs/yr)	Pollutant Emissions (tons/yr)
Acrolein	0.000005	0.000031	0.000009	0.000002	0.000077	0.000047	0.000028	0.000016	0.000013	0.000088	0.000028	12.220	0.006
Benzene	0.011209	0.005351	0.001002	0.000611	0.002344	0.006667	0.000648	0.004534	0.000537	0.005336	0.001410	2109.364	1.055
Formaldehyde	0.000010	0.000022	0.000006	0.000004	0.000096	0.000035	0.000267	0.000065	0.000009	0.000106	0.000169	8.672	0.004
Hydrogen Cyanide	0.000029	0.001053	0.001184	0.000118	0.000086	0.010526	0.000368	0.000607	0.003474	0.000175	0.000179	415.093	0.208
M-Xylene	0.000097	0.000439	0.000121	0.000021	0.000239	0.000585	0.002227	0.000243	0.000032	0.002522	0.000094	173.054	0.087
Napthalene	0.000049	0.000022	0.000030	0.000021	0.000048	0.000058	0.000040	0.000040	0.000032	0.000037	0.000005	8.672	0.004
O-Xylene	0.000049	0.000132	0.000030	0.000021	0.000287	0.000117	0.000729	0.000040	0.000032	0.003838	0.000094	52.034	0.026
Phenol	0.000975	0.003904	0.000203	0.000131	0.000057	0.002456	0.000024	0.000101	0.000016	0.000110	0.000273	1538.957	0.769
Toluene	0.000634	0.000833	0.000182	0.000063	0.000478	0.002807	0.000210	0.008826	0.000032	0.001535	0.000282	328.369	0.164
Total Aromatic Amines	0.000049	0.000351	0.001275	0.000021	0.000096	0.002339	0.000081	0.000364	0.003032	0.000037	0.000094	138.364	0.069
Total C2 to C5 Aldehydes	0.003070	0.000219	0.000273	0.000063	0.000766	0.000585	0.000243	0.017004	0.000158	0.002156	0.001316	86.330	0.043
Total HAPs	0.016174	0.012355	0.004318	0.001076	0.004574	0.026222	0.004777	0.031842	0.007364	0.015939	0.003943	4870.341	2.435

METHODOLOGY
HAPS emission rate (tons/yr) = Annual Usage (lbs/yr) * Emission Factor (lbs Chemical/lbs Index) * 1 ton/2000 lbs

Appendix A: Emission Calculations
Pouring - Cooling - Shakeout based on Binder Systems HAPs

Company Name: Manchester Metals, LLC
Address City IN Zip: 205 Wabash Road, North Manchester, Indiana 46962
Significant Source Modification No.: 169-30337-00019
Significant Permit Modification No.: 169-30355-00019
Reviewer: Heath Hartley
Application Date: March 11, 2011

Non-metal HAP Emissions from Pouring, Cooling and Shakeout due to one (1) isocure machine (ICM-L10(II))

Annual Usage of Index Material (lbs/yr)	Binder System Isocure
219000	Phenolic Urethane

	Binder System Type Emission Factors => Lbs. of Chemical Released to Air per Lbs. of Index											***	
Pollutant	Phenolic Nobake (Resin)	Phenolic Urethane (Resin)	Phenolic Hotbox (Resin)	Green Sand (Seacoal)	Core Oil (Core Oil)	Shell (Resin)	Low Nitrogen Furan (Resin)	Med Nitrogen Furan TSA Catalyst (Resin)	Furan Hotbox (Resin)	Alkyd Isocyanate (Resin & Isocyanate)	Sodium Silicate & Ester (Sugar & Ester)	Pollutant Emissions (lbs/yr)	Pollutant Emissions (tons/yr)
Acrolein	0.000005	0.000031	0.000009	0.000002	0.000077	0.000047	0.000028	0.000016	0.000013	0.000088	0.000028	6.789	0.003
Benzene	0.011209	0.005351	0.001002	0.000611	0.002344	0.006667	0.000648	0.004534	0.000537	0.005336	0.001410	1171.869	0.586
Formaldehyde	0.000010	0.000022	0.000006	0.000004	0.000096	0.000035	0.000267	0.000065	0.000009	0.000106	0.000169	4.818	0.002
Hydrogen Cyanide	0.000029	0.001053	0.001184	0.000118	0.000086	0.010526	0.000368	0.000607	0.003474	0.000175	0.000179	230.607	0.115
M-Xylene	0.000097	0.000439	0.000121	0.000021	0.000239	0.000585	0.002227	0.000243	0.000032	0.002522	0.000094	96.141	0.048
Napthalene	0.000049	0.000022	0.000030	0.000021	0.000048	0.000058	0.000040	0.000040	0.000032	0.000037	0.000005	4.818	0.002
O-Xylene	0.000049	0.000132	0.000030	0.000021	0.000287	0.000117	0.000729	0.000040	0.000032	0.003838	0.000094	28.908	0.014
Phenol	0.000975	0.003904	0.000203	0.000131	0.000057	0.002456	0.000024	0.000101	0.000016	0.000110	0.000273	854.976	0.427
Toluene	0.000634	0.000833	0.000182	0.000063	0.000478	0.002807	0.000210	0.008826	0.000032	0.001535	0.000282	182.427	0.091
Total Aromatic Amines	0.000049	0.000351	0.001275	0.000021	0.000096	0.002339	0.000081	0.000364	0.003032	0.000037	0.000094	76.869	0.038
Total C2 to C5 Aldehydes	0.003070	0.000219	0.000273	0.000063	0.000766	0.000585	0.000243	0.017004	0.000158	0.002156	0.001316	47.961	0.024
Total HAPs	0.016174	0.012355	0.004318	0.001076	0.004574	0.026222	0.004777	0.031842	0.007364	0.015939	0.003943	2705.745	1.353

Non-metal HAP Emissions from Pouring, Cooling and Shakeout due to one (1) isocure machine (ICM-L20(II))

Annual Usage of Index Material (lbs/yr)	Binder System Isocure
219000	Phenolic Urethane

	Binder System Type Emission Factors => Lbs. of Chemical Released to Air per Lbs. of Index											***	
Pollutant	Phenolic Nobake (Resin)	Phenolic Urethane (Resin)	Phenolic Hotbox (Resin)	Green Sand (Seacoal)	Core Oil (Core Oil)	Shell (Resin)	Low Nitrogen Furan (Resin)	Med Nitrogen Furan TSA Catalyst (Resin)	Furan Hotbox (Resin)	Alkyd Isocyanate (Resin & Isocyanate)	Sodium Silicate & Ester (Sugar & Ester)	Pollutant Emissions (lbs/yr)	Pollutant Emissions (tons/yr)
Acrolein	0.000005	0.000031	0.000009	0.000002	0.000077	0.000047	0.000028	0.000016	0.000013	0.000088	0.000028	6.789	0.003
Benzene	0.011209	0.005351	0.001002	0.000611	0.002344	0.006667	0.000648	0.004534	0.000537	0.005336	0.001410	1171.869	0.586
Formaldehyde	0.000010	0.000022	0.000006	0.000004	0.000096	0.000035	0.000267	0.000065	0.000009	0.000106	0.000169	4.818	0.002
Hydrogen Cyanide	0.000029	0.001053	0.001184	0.000118	0.000086	0.010526	0.000368	0.000607	0.003474	0.000175	0.000179	230.607	0.115
M-Xylene	0.000097	0.000439	0.000121	0.000021	0.000239	0.000585	0.002227	0.000243	0.000032	0.002522	0.000094	96.141	0.048
Napthalene	0.000049	0.000022	0.000030	0.000021	0.000048	0.000058	0.000040	0.000040	0.000032	0.000037	0.000005	4.818	0.002
O-Xylene	0.000049	0.000132	0.000030	0.000021	0.000287	0.000117	0.000729	0.000040	0.000032	0.003838	0.000094	28.908	0.014
Phenol	0.000975	0.003904	0.000203	0.000131	0.000057	0.002456	0.000024	0.000101	0.000016	0.000110	0.000273	854.976	0.427
Toluene	0.000634	0.000833	0.000182	0.000063	0.000478	0.002807	0.000210	0.008826	0.000032	0.001535	0.000282	182.427	0.091
Total Aromatic Amines	0.000049	0.000351	0.001275	0.000021	0.000096	0.002339	0.000081	0.000364	0.003032	0.000037	0.000094	76.869	0.038
Total C2 to C5 Aldehydes	0.003070	0.000219	0.000273	0.000063	0.000766	0.000585	0.000243	0.017004	0.000158	0.002156	0.001316	47.961	0.024
Total HAPs	0.016174	0.012355	0.004318	0.001076	0.004574	0.026222	0.004777	0.031842	0.007364	0.015939	0.003943	2705.745	1.353

METHODOLOGY

HAPS emission rate (tons/yr) = Annual Usage (lbs/yr) * Emission Factor (lbs Chemical/lbs Index) * 1 ton/2000 lbs

Appendix B: Emission Calculations
HAPs for Entire Source

Company Name: Manchester Metals, LLC
Address City IN Zip: 205 Wabash Road, North Manchester, Indiana 46962
Significant Source Modification No.: 169-30337-00019
Significant Permit Modification No.: 169-30355-00019
Reviewer: Heath Hartley
Application Date: March 11, 2011

	Chromium	Cobalt	Nickel	Arsenic	Cadmium	Selenium	Lead	Manganes	Benzene	Dichloro-b	Form-alde	Hexane	Toluene	MDI	Methanol	Phenol	Acrolein	Hydrogen Cyanide	Xylenes	Naphthaler	Glycol Ethers	Total Aromatic Amines	Total C2 to C5 Aldehydes	Total HAPs
Processes	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)
Scrap and Charge Handling	0.008	0.001	0.013	0.003	0.001	0	0.076	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.101
Melting (three (3) electric induction scrap iron furnaces and one (1) electric induction steel furnace)	0.008	0.001	0.013	0.003	0.001	0	0.296	0.739	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.060
Pouring/Casting	0.053	0.004	0.092	0.018	0.008	0.001	0.531	0	5.568	0	0.025	0	1.505	0	0	2.568	0.031	4.501	0.567	0.034	0.000	1.063	0.405	17.514
Cooling	0	0	0	0	0	0	0	0		0		0		0	0									
Shakeout (CO included in pouring/cooling)	0.040	0.003	0.070	0.014	0.006	0.001	0.405	0		0		0		0	0									
Cleaning and Finishing	0.028	0.002	0.050	0.010	0.004	0.001	0.020	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.115
One (1) mold sand handling system	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.000
North isocure core making process (CSH-North, ICM-L10)	0	0	0	0	0	0	0	0	0	0	0.058	0	0	0	0	0	0	0	0	0	0	0	0	0.058
North isocure core making process (CSH-North, ICM-L10(II))	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Shell core making process (SCM and SSH-North)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.000
One (1) air set core machine (ACM)	0	0	0	0	0	0	0	0	0	0	2.250	0	0	0	0	0	0	0	0	0	0	0	0	2.250
South isocure core making process (ICM-L20 and CSH-South)	0	0	0	0	0	0	0	0	0	0	0.001	0	0	0	0	0	0	0	0	0	0	0	0	0
South isocure core making process (ICM-L20(II))	0	0	0	0	0	0	0	0	0	0	0.001	0	0	0	0	0	0	0	0	0	0	0	0	0
One (1) core baking oven	0	0	0	0	0	0	0	0	0	0	0	0.004	0	0	0	0	0	0	0	0	0	0	0	0.004
Innoculation operations (Magnesium Treatment)	0	0	0	0	0	0	0	0	0	0	0	0.000	0	0	0	0	0	0	0	0	0	0	0	0.000
Preheater	0	0	0	0	0	0	0	0	0	0	0.004	0.086	0	0	0	0	0	0	0	0	0	0	0	0.091
Ladle Heaters	0	0	0	0	0	0	0	0	0	0	0.004	0.086	0	0	0	0	0	0	0	0	0	0	0	0.091
Annealing oven																								
Insignificant Combustion																								
Insignificant structural steel activities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Insignificant core wash	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Insignificant parts washer	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Insignificant woodworking	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Insignificant material handling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Insignficant grinding and machining	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Insignificant paved and unpaved roads	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Insignificant maintenance welding, and cutting	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0.136	0.011	0.239	0.047	0.022	0.004	1.327	0.739	5.569	0.000	2.342	0.177	1.505	0.000	0.000	2.568	0.031	4.501	0.567	0.034	0.000	1.063	0.405	21.286