IDEM

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Eric J. Holcomb
Governor

Bruno Pigott
Commissioner

NOTICE OF 30-DAY PERIOD
FOR PUBLIC COMMENT

Preliminary Findings Regarding the Renewal of a
Part 70 Operating Permit

for Bremen Castings, Inc. in Marshall County

Part 70 Operating Permit Renewal No.: T 099-37432-00001
Significant Source Modification No.: 099-39928-00001

The Indiana Department of Environmental Management (IDEM) has received an application from Bremen Castings, Inc. located at 500 North Baltimore Street, Bremen, Indiana 46506, for a significant source modification and renewal of its Part 70 Operating Permit issued on April 27, 2012. If approved by IDEM's Office of Air Quality (OAQ), this proposed modification would allow Bremen Castings, Inc. to make certain changes at its existing source. Bremen Castings, Inc. has applied to operate a new shot blast machine, identified as Shot #2, which replaced the existing shot blast machine.

The applicant intends to operate new equipment that will emit air pollutants; therefore, the permit contains new or different permit conditions. In addition, some conditions from previously issued permits have been corrected, changed, or removed. These corrections, changes, and removals may include Title I changes (e.g. changes that add or modify synthetic minor emission limits). IDEM has reviewed this application and has developed preliminary findings, consisting of a draft permit and several supporting documents, which would allow the applicant to make this change.

IDEM is aware that the shot blast machine, identified as Shot #2, has been constructed and operated prior to receipt of the proper permit. IDEM is reviewing this matter and will take appropriate action. This draft significant source modification and Part 70 Operating Permit renewal contains provisions to bring unpermitted equipment into compliance with construction and operation permit rules.

A copy of the permit application and IDEM's preliminary findings are available at:

Bremen Public Library
304 North Jackson Street
Bremen, IN 46506

and

IDEM Northern Regional Office
300 North Dr. Martin Luther King Jr. Boulevard, Suite 450
South Bend, IN 46601-1295

A copy of the preliminary findings is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/.

How can you participate in this process?

The date that this notice is published in a newspaper marks the beginning of a 30-day public comment period. If the 30th day of the comment period falls on a day when IDEM offices are closed for business, all comments must be postmarked or delivered in person on the next business day that IDEM is open.

You may request that IDEM hold a public hearing about this draft permit. If adverse comments concerning the **air pollution impact** of this draft permit are received, with a request for a public hearing, IDEM will decide whether or not to hold a public hearing. IDEM could also decide to hold a public meeting instead of, or in addition to, a public hearing. If a public hearing or meeting is held, IDEM will make a separate announcement of the date, time, and location of that hearing or meeting. At a hearing, you would have an opportunity to submit written comments and make verbal comments. At a meeting, you would have an opportunity to submit written comments, ask questions, and discuss any air pollution concerns with IDEM staff.

Comments and supporting documentation, or a request for a public hearing should be sent in writing to IDEM at the address below. If you comment via e-mail, please include your full U.S. mailing address so that you can be added to IDEM's mailing list to receive notice of future action related to this permit. If you do not want to comment at this time, but would like to receive notice of future action related to this permit application, please contact IDEM at the address below. Please refer to permit number T099-37432-00001 and 099-39928-00001 in all correspondence.

Comments should be sent to:

Rithika Reddy
IDEM, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
(800) 451-6027, ask for extension 4-9694
Or dial directly: (317) 234-9694
Fax: (317) 232-6749 attn: Rithika Reddy
E-mail: Rreddy@idem.IN.gov

All comments will be considered by IDEM when we make a decision to issue or deny the permit. Comments that are most likely to affect final permit decisions are those based on the rules and laws governing this permitting process (326 IAC 2), air quality issues, and technical issues. IDEM does not have legal authority to regulate zoning, odor, or noise. For such issues, please contact your local officials.

For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Permit Guide on the Internet at: http://www.in.gov/idem/5881.htm; and the Citizens' Guide to IDEM on the Internet at: http://www.in.gov/idem/6900.htm.

What will happen after IDEM makes a decision?

Following the end of the public comment period, IDEM will issue a Notice of Decision stating whether the permit has been issued or denied. If the permit is issued, it may be different than the draft permit because of comments that were received during the public comment period. If comments are received during the public notice period, the final decision will include a document that summarizes the comments and IDEM's response to those comments. If you have submitted comments or have asked to be added to the mailing list, you will receive a Notice of the Decision. The notice will provide details on how you may appeal IDEM's decision, if you disagree with that decision. The final decision will also be available on the Internet at the address indicated above, at the local library indicated above, at the IDEM Regional Office indicated above, and the IDEM public file room on the 12th floor of the Indiana Government Center North, 100 N. Senate Avenue, Indianapolis, Indiana 46204-2251.

If you have any questions, please contact Rithika Reddy of my staff at the above address.

Iryn Calilung, Section Chief
Permits Branch
Office of Air Quality

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Bruno L. Pigott
Commissioner

DRAFT

Mr. Scott Kiechle
Bremen Castings, Inc.
500 North Baltimore Street
Bremen, Indiana 46506

Re: 099-39928-00001
Significant Source Modification

Dear Mr. Kiechle:

Bremen Castings, Inc. was issued Part 70 Operating Permit Renewal No. T099-30729-00001 on April 27, 2012 for a stationary gray and ductile iron castings manufacturing plant located at 500 North Baltimore Street, Bremen, Indiana 46506. An application to modify the source was received on April 27, 2018. Pursuant to the provisions of 326 IAC 2-7-10.5, a Significant Source Modification is hereby approved as described in the attached Technical Support Document.

Pursuant to 326 IAC 2-7-10.5, the following emission unit is approved for construction at the source:

(a) One (1) shot blast machine, identified as Shot #2, constructed in 2012, with a maximum capacity of 4.2 tons per hour, using a baghouse for particulate control, identified as DC-1, and exhausting to stack DC-1.

The following construction conditions are applicable to the proposed modification:

General Construction Conditions

1. The data and information supplied with the application shall be considered part of this source modification approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Quality (OAQ).

2. This approval to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

Effective Date of the Permit

3. Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

Commenced Construction

4. Pursuant to 326 IAC 2-1.1-9 and 326 IAC 2-7-10.5(j), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.

DRAFT

Approval to Construct

6. Pursuant to 326 IAC 2-7-10.5(h)(2), this Significant Source Modification authorizes the construction of the new emission unit(s), when the Significant Source Modification has been issued.

Pursuant to 326 IAC 2-7-10.5(m), the emission units constructed under this approval shall not be placed into operation prior to revision of the source's Part 70 Operating Permit to incorporate the required operation conditions.

Pursuant to 326 IAC 2-7-12, operation of the new emission unit(s) is not approved until the Significant Permit Modification has been issued. Operating conditions shall be incorporated into the Part 70 Operating Permit as a Significant Permit Modification in accordance with 326 IAC 2-7-10.5(m)(2) and 326 IAC 2-7-12 (Permit Modification).

For the purposes of this permitting action, the Significant Permit Modification has been combined with the current Part 70 Operating Permit Renewal. Therefore, operation is not approved until the Part 70 Operating Permit Renewal has been issued.

A copy of the permit is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/. For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Air Permits page on the Internet at: http://www.in.gov/idem/airquality/2356.htm; and the Citizens' Guide to IDEM on the Internet at: http://www.in.gov/idem/6900.htm.

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 Rithika Reddy of my staff, OAQ, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana, 46204-2251, or call at (800) 451-6027, and ask for Rithika Reddy or dial (317) 234-9694.

Sincerely,

Iryn Calilung, Section Chief
Permits Branch
Office of Air Quality

Attachments: Significant Source Modification and Technical Support Document

cc: File - Marshall County
Marshall County Health Department
U.S. EPA, Region 5
Compliance and Enforcement Branch
IDEM Northern Regional Office

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DRAFT

Significant Source Modification to a Part 70 Source

Bremen Castings, Inc.
500 North Baltimore Street
Bremen, Indiana 46506

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

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. This permit also addresses certain new source review requirements for new and/or existing equipment and is intended to fulfill the new source review procedures pursuant to 326 IAC 2-7-10.5, applicable to those conditions.

Significant Source Modification No.: T099-39928-00001 Master AI ID: 11595	
Issued by: Iryn Calilung, Section Chief Permits Branch Office of Air Quality	Issuance Date:

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

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(14)][326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary gray and ductile iron castings manufacturing plant.

Source Address:	500 North Baltimore Street, Bremen, Indiana 46506
General Source Phone Number:	(574) 546-2411
SIC Code:	3321 (Gray and Ductile Iron Foundries)
County Location:	Marshall
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(14)]

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

(a) One (1) charge handling operation for charge materials for melting furnaces, constructed in 1972, with a nominal capacity of 15.4 tons of metal per hour, uncontrolled, and exhausting indoors.

(b) One (1) cupola melting operation consisting of the following:

(1) One (1) cupola furnace, identified as CUPOLA, constructed in 1972, with a nominal capacity of 14 tons of metal per hour, exhausting to stack DS-9, and equipped with the following controls:

(a) One (1) natural gas fired cupola afterburner for CO, VOC and organic HAPs emissions control, with a maximum capacity of 4.3 MMBtu per hour,

(b) One (1) wet scrubber for particulate, VOC and HAPs emissions control, identified as WS#1, and

(c) One (1) wet electrostatic precipitator for particulate matter control, identified as WESP.

(2) One (1) electric induction holding furnace for holding molten metal from the cupola furnace, constructed in 1988, with a nominal capacity of 40 tons per hour, uncontrolled, and exhausting indoors.

(3) Ladles for pouring molten metal into the molds, uncontrolled, and exhausting indoors.

(c) One (1) electric induction furnace (EIF) melting operation consisting of the following:

(1) Two (2) electric induction furnaces, identified as #1 and #2, each constructed in 1995, modified in 2004, each with a nominal capacity of 4 tons of metal per hour, using a common baghouse for particulate control, identified as DC-2, and exhausting to stack DC-2;

(2) One (1) inoculation operation for magnesium treatment of the molten metal from the electric induction furnaces to produce ductile iron, constructed prior to 1977, with a maximum capacity of 8 tons per hour, uncontrolled, and exhausting indoors, using one of the following:

(a) Flotret method of magnesium treatment, or

(b) Tundish ladle method of magnesium treatment.

This inoculation operation was modified in 2007 to include the tundish ladle method of magnesium treatment.

(3) Ladles for pouring molten metal into the molds, uncontrolled, exhausting indoors.

(d) Five (5) mold making lines, with a combined nominal metal throughput capacity of 20 tons per hour, and a combined green sand throughput of 100 tons per hour, uncontrolled, and consisting of the following:

(1) One (1) mold line, identified as Hunter #1, constructed in 2002, exhausting to three (3) stacks, and consisting of the following:

(A) One (1) mold making machine; and

(B) One (1) pouring and cooling operation, with a nominal metal throughput of 4 tons per hour.

(2) One (1) mold line, identified as Hunter #2, constructed in 1974, modified in 2005, exhausting to three (3) stacks, and consisting of the following:

(A) One (1) mold making machine; and

(B) One (1) pouring and cooling operation, with a nominal metal throughput of 4 tons per hour.

(3) One (1) mold line, identified as Hunter #5, constructed in 1979, exhausting to one (1) stack, and consisting of the following:

(A) One (1) mold making machine; and

(B) One (1) pouring and cooling operation, with a nominal metal throughput of 3 tons per hour.

(4) One (1) mold line, identified as Hunter #6, constructed in 1981, exhausting to one (1) stack, and consisting of the following:

(A) One (1) mold making machine; and

(B) One (1) pouring and cooling operation, with a nominal metal throughput of 3 tons per hour.

(5) One (1) mold making line, identified as Sinto #1, constructed in 1998, exhausting to three (3) stacks, and consisting of the following:

(A) One (1) mold making machine; and

(B) One (1) pouring and cooling operation, with a nominal metal throughput of 6 tons per hour.

(e) One (1) mold sand handling system for all mold making lines, constructed in 1975, with a nominal sand throughput of 100 tons per hour, using a common baghouse for particulate control, identified as DC-2, exhausting to stack DC-2, and consisting of:

(1) one (1) shakeout system (including one (1) shaker pan and one (1) rotary shakeout)
(2) one (1) sand muller,
(3) two (2) silos,
(4) two (2) sand storage tanks,
(5) two (2) elevators,
(6) conveyors,
(7) one (1) magnetic separator,
(8) one (1) sand cooler,
(9) one (1) sand screen, and
(10) one (1) recycle sand hopper.

(f) One (1) shell core making process, with a total nominal capacity of 0.7 tons of cores per hour, consisting of the following seven (7) natural gas fired shell core machines, uncontrolled, and exhausting to two (2) stacks, identified as RE-19 and RE-20:

Emission Unit ID	Year of Construction	Maximum capacity (MMBtu/hr)
#1, #2, #3	1964	0.15 each
#4	1972	0.15
#5, #6	1970	0.125 each
#7	1963	0.093

(g) One (1) isocure core making process consisting of the following:

(1) One (1) New Sand Silo, with a nominal capacity of 3 tons of sand per hour, and exhausting through Bin Vent #3 to stack BV-3.

(2) One (1) sand mixer, constructed in 2007, with a nominal capacity of 3 tons of sand per hour, and exhausting through Bin Vent #4 inside the building.

(3) Three (3) phenolic urethane isocure core machines, identified as Isocure #1, Isocure #2 and Isocure #3, constructed in 1978, 1978, and 2002, respectively, each with a nominal capacity of 1.0 ton of cores per hour, uncontrolled, and exhausting to one (1) common stack, identified as DS-12.

(4) Two (2) working core storage areas, uncontrolled, and exhausting to stacks EF-1 and EF-2.

(h) Three (3) shot blasting operations, with a combined maximum throughput of 8.4 tons per hour, consisting of the following:

(1) One (1) shot blast machine, identified as Shot #1, constructed in 1944, with a maximum capacity of 4.2 tons per hour, using a baghouse for particulate control, identified as DC-1, and exhausting to stack DC-1.

(2) One (1) shot blast machine, identified as Shot #2, constructed in 2012, with a maximum capacity of 4.2 tons per hour, using a baghouse for particulate control, identified as DC-1, and exhausting to stack DC-1.

This shot blast machine replaced an existing shot blast machine that was constructed in 1963.

(3) One (1) shot blast machine, identified as Shot #3, constructed in 1974, with a maximum capacity of 4.2 tons per hour, using a baghouse for particulate control, identified as DC-1, and exhausting to stack DC-1.

(i) One (1) grinding and finishing process, consisting of the following grinders, with a combined metal throughput capacity of 8.4 tons per hour, using a baghouse for particulate control, identified as DC-1, and exhausting to stack DC-1.

Emission Unit ID	Year of Construction	Throughput capacity (tons per hour)
Grinders #1-#6	1987	8.4
Grinder #7	2000	
Robotic grinder Foxall #10	2005	
Barinder #1-#2	2010	
Robotic grinding cell #1 (Robots #1-#2)	2013	
Robotic grinding cell #1 (Robots #3-#4)	2013	

The shot blasting operations and the grinding and finishing process share a baghouse, DC-1, and exhaust to one (1) common stack DC-1.

(j) One (1) 3-D printer, identified as Printer #1, used for making Furan no-bake cores and molds, constructed in 2017, with a maximum throughput of 830.37 tons of sand per year, uncontrolled, and exhausting indoors.

A.3 Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-7-4(c)][326 IAC 2-7-5(14)]

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

(a) Thirty-seven (37) natural gas-fired combustion sources consisting of:

Emission Unit	Year of Construction	Capacity (MMBtu/hr)	Direct/ Indirect	Exhausted
Gas heaters				
Gas #01	1972	1.5	Indirect	Stack
Gas #02	7995		Indirect	Stack
Gas #03	1995		Indirect	Stack
Gas #04	1995		Indirect	Stack
Gas #05	1996		Indirect	Stack
Gas #06	1996		Indirect	Stack
Gas #07	1995		Indirect	Stack
Gas #08	1972		Indirect	Stack
Gas #09	1995		Indirect	Stack
Gas #10	1995		Indirect	Stack
Gas #11	1972		Indirect	Stack
Gas #12	1996		Indirect	Stack
Gas #13	1972		Indirect	Stack
Infra Heaters				
Infra #01IR	2002	0.737	Indirect	Indoors
Infra #02IR	2002		Indirect	Indoors
Infra #05IR	1998		Indirect	Indoors
Infra #06IR	1998		Indirect	Indoors
Infra #07IR	1995		Indirect	Indoors
Infra #08IR	1995		Indirect	Indoors
Infra #09IR	1995		Indirect	Indoors
Infra #10IR	1995		Indirect	Indoors
Infra #11IR	1995		Indirect	Indoors
Infra #12IR	1990		Indirect	Indoors
Infra #13IR	1990		Indirect	Indoors
Infra #14IR	1992		Indirect	Indoors
Infra #15IR	1990		Indirect	Indoors
Infra #16IR	1985		Indirect	Indoors
Tube Heaters				
Tube #01TIR	1980	0.6	Indirect	Indoors
Tube #02TIR	1980		Indirect	Indoors
Tube #03TIR	1980		Indirect	Indoors
Tube #04TIR	1980		Indirect	Indoors
Tube #05TIR	1980		Indirect	Indoors
Tube #06TIR	1980		Indirect	Indoors
Core oven	1971	0.51	Indirect	Stack

Pan heater #1	1998	2.4	Indirect	Stack
Pan heater #2	2002		Indirect	Stack
Hot blast heater (for cupola combustion air)	1972	5.2	Indirect	Stack

(2) This stationary source also includes the following insignificant activities which are not specifically regulated, as defined in 326 IAC 2-7-1(21):

(a) Twelve (12) natural gas-fired combustion sources consisting of:

Emission Unit	Year of Construction	Capacity (MMBtu/hr)	Direct/ Indirect	Exhausted
Dock Heaters				
Dock #01	1988	3.0	Direct	Indoors
Dock #02	1988		Direct	Indoors
Dock #03	1995		Direct	Indoors
Dock #04	1978		Direct	Indoors
Air make-up units				
AMU #1	1996	25.9	Direct	Indoors
AMU #2	1996		Direct	Indoors
AMU #3	1963		Direct	Indoors
AMU #4	1995		Direct	Indoors
AMU #5	1963		Direct	Indoors
AMU #6	1963		Direct	Indoors
Didion inlet	1995	1.3	Direct	DC-2

(b) Paved and unpaved roads and parking lots with public access

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 Revocation of Permits [326 IAC 2-2-8]

Pursuant to 326 IAC 2-2-8(a)(1), this permit to construct shall expire if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is discontinued for a period of eighteen (18) months or more.

B.3 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, T099-37432-00001, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.

(b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

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

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

(a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or

(b) the emission unit to which the condition pertains permanently ceases operation.

B.5 Enforceability [326 IAC 2-7-7] [IC 13-17-12]

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

B.6 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.7 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.8 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.9 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:

(1) it contains a certification by a "responsible official" as defined by 326 IAC 2-7-1(35), and

(2) 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(35).

B.10 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(35).

B.11 Preventive Maintenance Plan [326 IAC 2-7-5(12)][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 a "responsible official" as defined by 326 IAC 2-7-1(35).

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(35).

(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.12 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 or Northern Regional Office within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance and Enforcement Branch), or
Telephone Number: 317-233-0178 (ask for Office of Air Quality, Compliance and Enforcement Branch)
Facsimile Number: 317-233-6865
Northern Regional Office phone: (574) 245-4870; fax: (574) 245-4877**.**

(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(35).

(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)(8) 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.13 Permit Shield [326 IAC 2-7-15][326 IAC 2-7-20][326 IAC 2-7-12]

(a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

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

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

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

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

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

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

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

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

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

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

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

B.14 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 T099-37432-00001 and issued pursuant to permitting programs approved into the state implementation plan have been either:

(1) incorporated as originally stated,

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

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

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

B.15 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.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)][326 IAC 2-7-8(a)][326 IAC 2-7-9]

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require 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(35).

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

(1) That this permit contains a material mistake.

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

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

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

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

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

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(42). 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(35).

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

(a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
Any such application 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(35).

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

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

(a) No Part 70 permit revision 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.20 Operational Flexibility [326 IAC 2-7-20][326 IAC 2-7-10.5]

(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b) or (c) 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)(1) and (c)(1). 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) and (c)(1).

(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(37)) 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 "responsible official" as defined by 326 IAC 2-7-1(35).

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

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

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

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

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

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

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

(a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy any records that must be kept under the conditions of this permit;

(c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.23 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

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

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

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

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(35).

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

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

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

(b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.

(c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

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

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

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

C.1 Particulate Emission Limitations for Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]

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

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-1 (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. 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 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(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(35).

(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(35).

(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)]

(a) For new units:
Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units shall be implemented on and after the date of initial start-up.

(b) For existing units:
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 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, 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(35).

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. The analog instrument shall be capable of measuring values outside of the normal range.

(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(11)] [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]

(I) Upon detecting an excursion where a response step is required by the D Section, or an exceedance of a limitation, not subject to CAM, 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 response steps taken.

(II)

(a) CAM *Response to excursions or exceedances.*

(1) Upon detecting an excursion or exceedance, subject to CAM, the Permittee shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

(2) 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, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

(b) If the Permittee identifies a failure to achieve compliance with an emission limitation, subject to CAM, or standard, subject to CAM, for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the Permittee shall promptly notify the IDEM, OAQ and, if necessary, submit a proposed significant permit modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the

frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

(c) Based on the results of a determination made under paragraph (II)(a)(2) of this condition, the EPA or IDEM, OAQ may require the Permittee to develop and implement a Quality Improvement Plan. The Permittee shall develop and implement a QIP if notified to in writing by the EPA or IDEM, OAQ.

(d) Elements of a QIP:
The Permittee shall maintain a written QIP, if required, and have it available for inspection. The plan shall conform to 40 CFR 64.8 b (2).

(e) If a QIP is required, the Permittee shall develop and implement a QIP as expeditiously as practicable and shall notify the IDEM, OAQ if the period for completing the improvements contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined.

(f) Following implementation of a QIP, upon any subsequent determination pursuant to paragraph (II)(a)(2) of this condition the EPA or the IDEM, OAQ may require that the Permittee make reasonable changes to the QIP if the QIP is found to have:

(1) Failed to address the cause of the control device performance problems; or

(2) Failed to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

(g) Implementation of a QIP shall not excuse the Permittee from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act.

(h) *CAM recordkeeping requirements.*

(1) The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to paragraph (II)(c) of this condition and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under this condition (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions). Section C - General Record Keeping Requirements of this permit contains the Permittee's obligations with regard to the records required by this condition.

(2) Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements

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 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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]

In accordance with the compliance schedule specified in 326 IAC 2-6-3(b)(1), starting in 2004 and every three (3) years thereafter, the Permittee shall submit by July 1 an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:

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

(2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1(33) (“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 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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

(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. Support information includes the following, where applicable:

(AA) All calibration and maintenance records.
(BB) All original strip chart recordings for continuous monitoring instrumentation.
(CC) Copies of all reports required by the Part 70 permit.

Records of required monitoring information include the following, where applicable:

(AA) The date, place, as defined in this permit, and time of sampling or measurements.
(BB) The dates analyses were performed.
(CC) The company or entity that performed the analyses.
(DD) The analytical techniques or methods used.
(EE) The results of such analyses.

(FF) The operating conditions as existing at the time of sampling or measurement.

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)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(rr) and/or 326 IAC 2-3-1(mm)), the Permittee shall comply with following:

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

(A) A description of the project.

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

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

(i) Baseline actual emissions;

(ii) Projected actual emissions;

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

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

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

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

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

C.18 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

(a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Proper notice submittal under Section B –Emergency Provisions satisfies the reporting requirements of this paragraph. 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(35). 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 recordkeeping provisions of (d) in Section C - General Record Keeping Requirements for any “project” (as defined in 326 IAC 2-2-1 (qq) and/or 326 IAC 2-3-1 (ll)) at an existing emissions unit, and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ:

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

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

(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

Emissions Unit Description:

(a) One (1) charge handling operation for charge materials for melting furnaces, constructed in 1972, with a nominal capacity of 15.4 tons of metal per hour, uncontrolled, and exhausting indoors.

(b) One (1) cupola melting operation consisting of the following:

(1) One (1) cupola furnace, identified as CUPOLA, constructed in 1972, with a nominal capacity of 14 tons of metal per hour, exhausting to stack DS-9, and equipped with the following controls:

(a) One (1) natural gas fired cupola afterburner for CO, VOC and organic HAPs emissions control, with a maximum capacity of 4.3 MMBtu per hour,

(b) One (1) wet scrubber for particulate, VOC and HAPs emissions control, identified as WS#1, and

(c) One (1) wet electrostatic precipitator for particulate matter control, identified as WESP.

(2) One (1) electric induction holding furnace for holding molten metal from the cupola furnace, constructed in 1988, with a nominal capacity of 40 tons per hour, uncontrolled, and exhausting indoors.

(3) Ladles for pouring molten metal into the molds, uncontrolled, and exhausting indoors.

(c) One (1) electric induction furnace (EIF) melting operation consisting of the following:

(1) Two (2) electric induction furnaces, identified as #1 and #2, each constructed in 1995, modified in 2004, each with a nominal capacity of 4 tons of metal per hour, using a common baghouse for particulate control, identified as DC-2, and exhausting to stack DC-2;

(2) One (1) inoculation operation for magnesium treatment of the molten metal from the electric induction furnaces to produce ductile iron, constructed prior to 1977, with a maximum capacity of 8 tons per hour, uncontrolled, and exhausting indoors, using one of the following:

(a) Flotret method of magnesium treatment, or

(b) Tundish ladle method of magnesium treatment.

This inoculation operation was modified in 2007 to include the tundish ladle method of magnesium treatment.

(3) Ladles for pouring molten metal into the molds, uncontrolled, exhausting indoors.

(d) Five (5) mold making lines, with a combined nominal metal throughput capacity of 20 tons per hour, and a combined green sand throughput of 100 tons per hour, uncontrolled, and consisting of the following:

(1) One (1) mold line, identified as Hunter #1, constructed in 2002, exhausting to three (3)

stacks, and consisting of the following:

(A) One (1) mold making machine; and

(B) One (1) pouring and cooling operation, with a nominal metal throughput of 4 tons per hour.

(2) One (1) mold line, identified as Hunter #2, constructed in 1974, modified in 2005, exhausting to three (3) stacks, and consisting of the following:

(A) One (1) mold making machine; and

(B) One (1) pouring and cooling operation, with a nominal metal throughput of 4 tons per hour.

(3) One (1) mold line, identified as Hunter #5, constructed in 1979, exhausting to one (1) stack, and consisting of the following:

(A) One (1) mold making machine; and

(B) One (1) pouring and cooling operation, with a nominal metal throughput of 3 tons per hour.

(4) One (1) mold line, identified as Hunter #6, constructed in 1981, exhausting to one (1) stack, and consisting of the following:

(A) One (1) mold making machine; and

(B) One (1) pouring and cooling operation, with a nominal metal throughput of 3 tons per hour.

(5) One (1) mold making line, identified as Sinto #1, constructed in 1998, exhausting to three (3) stacks, and consisting of the following:

(A) One (1) mold making machine; and

(B) One (1) pouring and cooling operation, with a nominal metal throughput of 6 tons per hour.

(e) One (1) mold sand handling system for all mold making lines, constructed in 1975, with a nominal sand throughput of 100 tons per hour, using a common baghouse for particulate control, identified as DC-2, exhausting to stack DC-2, and consisting of:

(1) one (1) shakeout system (including one (1) shaker pan and one (1) rotary shakeout)
(2) one (1) sand muller,
(3) two (2) silos,
(4) two (2) sand storage tanks,
(5) two (2) elevators,
(6) conveyors,
(7) one (1) magnetic separator,
(8) one (1) sand cooler,
(9) one (1) sand screen, and
(10) one (1) recycle sand hopper.

(f) One (1) shell core making process, with a total nominal capacity of 0.7 tons of cores per hour, consisting of the following seven (7) natural gas fired shell core machines, uncontrolled, and exhausting to two (2) stacks, identified as RE-19 and RE-20:

Emission Unit ID	Year of Construction	Maximum capacity (MMBtu/hr)
#1, #2, #3	1964	0.15 each
#4	1972	0.15
#5, #6	1970	0.125 each
#7	1963	0.093

(g) One (1) isocure core making process consisting of the following:

(1) One (1) New Sand Silo, with a nominal capacity of 3 tons of sand per hour, and exhausting through Bin Vent #3 to stack BV-3.

(2) One (1) sand mixer, constructed in 2007, with a nominal capacity of 3 tons of sand per hour, and exhausting through Bin Vent #4 inside the building.

(3) Three (3) phenolic urethane isocure core machines, identified as Isocure #1, Isocure #2 and Isocure #3, constructed in 1978, 1978, and 2002, respectively, each with a nominal capacity of 1.0 ton of cores per hour, uncontrolled, and exhausting to one (1) common stack, identified as DS-12.

(4) Two (2) working core storage areas, uncontrolled, and exhausting to stacks EF-1 and EF-2.

(h) Three (3) shot blasting operations with a combined maximum throughput of 8.4 tons per hour, consisting of the following:

(1) One (1) shot blast machine, identified as Shot #1, constructed in 1944, with a maximum capacity of 4.2 tons per hour, using a baghouse for particulate control, identified as DC-1, and exhausting to stack DC-1.

(2) One (1) shot blast machine, identified as Shot #2, constructed in 2012, with a maximum capacity of 4.2 tons per hour, using a baghouse for particulate control, identified as DC-1, and exhausting to stack DC-1.

This shot blast machine replaced an existing shot blast machine that was constructed in 1963.

(3) One (1) shot blast machine, identified as Shot #3, constructed in 1974, with a maximum capacity of 4.2 tons per hour, using a baghouse for particulate control, identified as DC-1, and exhausting to stack DC-1.

(i) One (1) grinding and finishing process, consisting of the following grinders, with a combined metal throughput capacity of 8.4 tons per hour, using a baghouse for particulate control, identified as DC-1, and exhausting to stack DC-1.

Emission Unit ID	Year of Construction	Throughput capacity (tons per hour)
Grinders #1-#6	1987	8.4

Grinder #7	2000	
Robotic grinder Foxall #10	2005	
Barinder #1-#2	2010	
Robotic grinding cell #1 (Robots #1-#2)	2013	
Robotic grinding cell #1 (Robots #3-#4)	2013	

The shot blasting operations and the grinding and finishing process share a baghouse, DC-1, and exhaust to one (1) common stack DC-1.

(j) One (1) 3-D printer, identified as Printer #1, used for making Furan no-bake cores and molds, constructed in 2017, with a maximum throughput of 830.37 tons of sand per year, uncontrolled, and exhausting indoors.

(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 Prevention of Significant Deterioration (PSD) Minor Limits [326 IAC 2-2]

In order to render 326 IAC 2-2 not applicable, the Permittee shall comply with the following:

Hunter #1

(a) The amount of iron throughput to Hunter #1 mold line shall not exceed 30,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

(b) The PM emissions from Hunter #1 shall not exceed 1.5 pounds of PM per ton of iron throughput.

(c) The PM10 emissions from Hunter #1 shall not exceed 0.99 pounds of PM10 per ton of iron throughput.

(d) The CO emissions from Hunter #1 shall not exceed 6.0 pounds of CO per ton of iron throughput.

Compliance with these limits shall limit the PM, PM10, and CO emissions from Hunter #1 to less than 25, 15, and 100 tons per twelve (12) consecutive month period, respectively, and render the requirements of 326 IAC 2-2 (PSD) not applicable to the 2002 modification.

Sinto #1

(e) The amount of iron throughput to Sinto #1 shall not exceed 30,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month

(f) The PM emissions from Sinto #1 shall not exceed 1.5 pounds of PM per ton of iron throughput.

(g) The PM10 emissions from Sinto #1 shall not exceed 0.99 pounds of PM10 per ton of iron throughput.

(h) The CO emissions from Sinto #1 shall not exceed 6.0 pounds of CO per ton of iron throughput.

Compliance with these limits shall limit the PM, PM10, and CO emissions from Sinto #1 to less than 25, 15, and 100 tons per twelve (12) consecutive month period, respectively, and render the requirements of 326 IAC 2-2 (PSD) not applicable to the 1998 modification.

Grinding and finishing process

(i) The total PM emissions after control (DC-1) from the grinding and finishing process shall not exceed 5.68 pounds per hour.

(j) The total PM10 emissions after control (DC-1) from the grinding and finishing process shall not exceed 3.4 pounds per hour.

Compliance with the above limits shall limit the total potential to emit PM and PM10 to less than 25 and 15 tons per twelve (12) consecutive month period, respectively, and render the requirements of 326 IAC 2-2 (PSD) not applicable to the 1987 modification (Grinders #1 to #6), 2000 modification (Grinder #7), 2005 modification (Foxall #10), 2010 modification (Barinders #1-#2), and 2013 modification (Robotic grinding cell #1 and Robotic grinding cell #2).

Shot #2

(k) The PM emissions after control (DC-1) from the shot blast machine, Shot #2, shall not exceed 5.68 pounds per hour.

(l) The PM10 emissions after control (DC-1) from the shot blast machine, Shot #2, shall not exceed 3.40 pounds per hour.

(m) The PM2.5 emissions after control (DC-1) from the shot blast machine, Shot #2, shall not exceed 2.24 pounds per hour.

Compliance with these limits shall limit the PM, PM10, and PM2.5 emissions from Shot #2 to less than 25, 15, and 10 tons per twelve (12) consecutive month period, respectively, and render the requirements of 326 IAC 2-2 (PSD) not applicable to the 2012 modification.

D.1.2 Minor Source Modifications [326 IAC 2-7-10.5(d)][326 IAC 2-2]

Pursuant to 326 IAC 2-7-10.5(d)(4)(C) (Minor Source Modifications) (Repealed) and Permit No. 099-24837-00001, issued on July 16, 2007, and in order to render 326 IAC 2-2 not applicable, the Permittee shall limit the PM emissions after the Bin Vent #4 from the sand mixer of the isocure core making process to less than 25 tons per year by:

(a) Operating with a control efficiency of at least 99%; and

(b) No visible emissions.

D.1.3 Particulate Emission Limitations [326 IAC 11-1-2]

Pursuant to 326 IAC 11-1-2, the allowable particulate emission rate from the cupola shall not exceed 28.8 pounds per hour when operating at a process weight rate of 28,000 pounds per hour.

D.1.4 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the facilities listed below shall not exceed as specified when operating at the respective process weight rate:

Process Description	Process Weight Rate (tons/hr)	Allowable Emissions (lbs/hr)	Equation used
Charge handling operation	15	25.61	(a)
Inoculation (Mg treatment)	8.00	16.51	(a)
Induction furnace #1	4.00	10.38	(a)
Induction furnace #2	4.00	10.38	(a)
Hunter #1	45.20	43.64	(b)
Hunter #2	45.20	43.64	(b)
Hunter #5	21.90	32.43	(a)
Hunter #6	21.90	32.43	(a)
Sinto #1	54.00	45.30	(b)
Shakeout system for all mold lines	20.00	30.51	(a)
Mold sand handling for all mold lines	100.00	51.28	(b)
Shell core sand handling	0.70	3.23	(a)
Isocure core sand handling (silo and sand mixer)	3.00	8.56	(a)
Shot #1	4.20	10.72	(a)
Shot #2	4.20	10.72	(a)
Shot #3	4.20	10.72	(a)
Grinding and finishing	8.40	17.06	(a)

The pound per hour limitation was calculated with the following equations:

(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

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

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

D.1.5 HAPs Minor Limits [40 CFR 63]

In order to render 40 CFR 63, Subpart EEEEE (5E) not applicable, the Permittee shall comply with the following:

Total HAPs

(a) The total emissions of any combinations of HAPs from the following operations:

Charge handling operation
Cupola
Induction furnace #1
Induction furnace #2
Hunter #1
Hunter #2
Hunter #5

Hunter #6
Sinto #1
Shakeout system for all mold lines
Shell core machines
Isocure #1
Isocure #2
Isocure #3
Shot #1
Shot #2
Shot #3
Grinding and Finishing

shall be limited such that the potential to emit (PTE) of combination of all Hazardous Air Pollutants (HAPs) shall not exceed 24.60 tons per twelve (12) consecutive month period with compliance determined at the end of the month.

Compliance with these limits combined with the potential to emit HAPs from all other emission units at this source, shall limit the source-wide total potential to emit of any combination of HAPs to less than twenty five (25) tons per twelve (12) consecutive month period, and and render this an area source of HAPs.

Single HAP

(b) The total emission of Benzene from the following operations:

Hunter #1
Hunter #2
Hunter #5
Hunter #6
Sinto #1

shall be limited such that the potential to emit (PTE) of Benzene shall not exceed 9.90 tons per twelve (12) consecutive month period with compliance determined at the end of the month.

(c) The total emission of Manganese from the following operations:

Charge handling operation
Cupola
Induction furnace # 1
Induction furnace # 2
Hunter #1
Hunter #2
Hunter #5
Hunter #6
Sinto #1
Shakeout system for all mold lines
Shot #1
Shot #2
Shot #3
Grinding and finishing

shall be limited such that the potential to emit (PTE) of Manganese shall not exceed 9.90 tons per twelve (12) consecutive month period with compliance determined at the end of the month.

Compliance with these limits shall limit the source-wide total potential to emit of any single HAP to less than ten (10) tons per twelve (12) consecutive month period, and render this an area source of HAPs.

D.1.6 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan (PMP) is required for these facilities and their control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

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

D.1.7 Testing Requirements [326 IAC 2-1.1-11]

(a) Hunter #1
In order to demonstrate compliance with Conditions D.1.1(b), D.1.1(c) and D.1.4, the Permittee shall conduct PM and PM10 testing for Hunter #1 mold line utilizing methods approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration.

PM10 includes filterable and condensable PM.

(b) Grinding and finishing
In order to demonstrate compliance with Conditions D.1.1(i), D.1.1(j), and D.1.4, the Permittee shall conduct PM and PM10 testing for grinding and finishing operations utilizing methods approved by the Commissioner no later than one hundred and eighty (180) days after the issuance of this permit No. T099-37432-00001. This test shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration.

PM10 includes filterable and condensable PM.

(c) Shot #2
In order to demonstrate compliance with Conditions D.1.1(k), D.1.1(l), D.1.1(m), and D.1.4, the Permittee shall conduct PM, PM10, and PM2.5 testing for Shot #2 utilizing methods approved by the Commissioner no later than one hundred and eighty (180) days after the issuance of this permit No. T099-37432-00001. This test shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration.

PM10 and PM2.5 include filterable and condensable PM.

(d) Cupola
In order to demonstrate the compliance status with Condition D.1.3, the Permittee shall conduct PM testing for Cupola utilizing methods approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration.

(e) 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.1.8 Particulate and HAP Emission Control

(a) In order to comply with Conditions D.1.1, D.1.2, and D.1.4, the associated control devices for particulate control shall be in operation at all times when the following emission units are in operation:

Shakeout system for all mold lines
Mold sand handling for all mold lines
Isocure core sand handling (silo and sand mixer)
Shot #1
Shot #2
Shot #3
Grinding and finishing

(b) In order to comply with Conditions D.1.3 and D.1.5, the wet scrubber, wet electrostatic precipitator, and afterburner shall be in operation and control emissions from the cupola at all times that the cupola is in operation.

D.1.9 HAPs Minor Limit

Compliance with the HAP limits in Condition D.1.5 shall be demonstrated using the following equations:

(1) Source-wide Total HAP Emissions (tons/yr) = $\sum T_i$ = $T_{CH} + T_{CUP} + T_{EIF} + T_{PCC} + T_{SHO} + T_{SC} + T_{IC} + T_{SB} + T_{GF}$

$T_i = EF_i * M_i * 1$ ton/2000 lbs

Where:
T_i = Total HAP emissions from i operation (tons per twelve (12) consecutive month period)
EF_i = Pound total HAP per ton of metal throughput or sand throughput (as applicable) to i operation
M_i = Total metal or sand throughput to i operation (tons per twelve (12) consecutive month period)

i	Operation	Emission Factor, EF_i (lb total HAP/ ton of throughput)
CH	Charge handling	0.023
CUP	Cupola	0.135
EIF	Electric induction furnaces (# 1 and #2)	0.002
PCC	Mold making lines (Hunter #1, Hunter #2, Hunter #5, Hunter #6 and Sinto #1)	0.35
*SHO	Shakeout system for all mold lines	0.12
SC	Shell core machines	0.242
IC	Isocure core machines	0.04
SB	Shot blasting	0.587
GF	Grinding and finishing	0.587

* The organic HAP emissions from the shakeout system have been included with the HAP emissions from the mold making lines (Hunter #1, Hunter #2, Hunter #5, Hunter #6 and Sinto #1)

(2) Source-wide Single HAP Emissions (tons/yr)

(a) Benzene

$T_B = EF_B * M_{PCC} * 1 \text{ ton}/2000 \text{ lbs}$

Where:
T_B = Total benzene emissions from the mold making lines (Hunter #1, Hunter #2, Hunter #5, Hunter #6 and Sinto #1) and shakeout system (tons per twelve (12) consecutive month period)

EF_B = 0.165 pound total benzene per ton of metal throughput to the mold making lines (Hunter #1, Hunter #2, Hunter #5, Hunter #6 and Sinto #1) and shakeout system

M_{PCC} = Total metal throughput to the mold making lines (Hunter #1, Hunter #2, Hunter #5, Hunter #6 and Sinto #1) shakeout system (tons per twelve (12) consecutive month period)

(b) Manganese

$T_M = \sum T_j = T_{MCH} + T_{MCUP} + T_{MEIF} + T_{MPCC} + T_{MSHO} + T_{MSB} + T_{MGF}$

$T_j = EF_j * M_j * 1 \text{ ton}/2000 \text{ lbs}$

Where:
T_M = Total manganese emissions from the source (tons per twelve (12) consecutive month period)
T_j = Total manganese emissions from j operation (tons per twelve (12) consecutive month period)
EF_j = Pound manganese per ton of metal throughput to j operation
M_j = Total metal throughput to j operation (tons per twelve (12) consecutive month period)

j	Operation	Emission Factor, EF_j (lb Mn/ ton of throughput)
MCH	Charge handling	0.0186
MCUP	Cupola	0.113
MEIF	Electric induction furnaces (# 1 and #2)	0.00088
MPCC	Mold making lines: (Hunter #1, Hunter #2, Hunter #5, Hunter #6 and Sinto #1)	0.047
MSHO	Shakeout system for all mold lines	0.099
MSB	Shot blasting	0.48
MGF	Grinding and finishing	0.48

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

D.1.10 Visible Emissions Notations [40 CFR 64]

(a) Visible emission notations of stack exhaust from the following:

Emission Unit	Control Device
Isocure core sand handling	Bin Vent Filter #3

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 a reasonable response. Section C - Response to Excursions and 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.

The above compliance condition will also satisfy the requirements of 40 CFR 64, Compliance Assurance Monitoring, for shakeout system and mold sand handling for all mold lines.

D.1.11 Parametric Monitoring [40 CFR 64]

(a) The Permittee shall monitor and record the pressure drop across baghouses, DC-1 and DC-2, at least once per day when the associated emission units are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range or a range established during the latest stack test, the Permittee shall take reasonable response steps.

Emission Unit/ Process	Baghouse	Range (inches of water)
Induction Furnace #1	DC-2	1.0 - 8.0
Induction Furnace #2		
Mold sand handling for all mold lines		
Shakeout system for all mold lines		
Shot #1	DC-1	3.0 - 9.0
Shot #2		
Shot #3		
Grinding and finishing		

(b) The Permittee shall record the flow rate to and pressure drop across the wet scrubber used in conjunction with the cupola, at least once per day when the cupola is in operation. When for any one reading, the scrubbing water flow rate is less than 70 gallons per minute or the pressure drop across the scrubber is less than 23 inches of water, the Permittee shall take reasonable response steps.

(c) Section C - Response to Excursions and 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.

(d) The instruments used for determining the pressure drop 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.

The above compliance condition will also satisfy the requirements of 40 CFR 64, Compliance Assurance Monitoring, for the cupola, shakeout system, and mold sand handling for all mold lines.

D.1.12 Broken or Failed Bag Detection [40 CFR 64]

In the event that bag failure has been observed:

(a) 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.

(b) 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 have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

(c) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down no later than the completion of the processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

The above compliance condition will also satisfy the requirements of 40 CFR 64, Compliance Assurance Monitoring, for shakeout and mold sand handling for all mold lines.

D.1.13 Scrubber Failure Detection [40 CFR Part 64]

In the event that scrubber failure has been observed:

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

The above compliance condition will also satisfy the requirements of 40 CFR 64, Compliance Assurance Monitoring, for the cupola.

D.1.14 Afterburner Temperature

(a) A continuous monitoring system shall be calibrated, maintained, and operated on the cupola for measuring operating temperature of the cupola gas stream. For the purpose of this condition, continuous means no less than once every fifteen (15) minutes. The output of this system shall be recorded as a 3-hour average. The Permittee shall operate the afterburner at or above 1300°F. The Permittee shall take appropriate response steps whenever the temperature of the afterburner is below 1300°F. A three (3) hour average temperature that is below the minimum is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

(b) When the cupola is turned off and restarted, the 3-hour average shall include the last 3 total (non-continuous) hours of operation for which the minimum temperature requirements apply.

(c) These minimum temperature requirements apply at all times during operation of the cupola, except for the following:

(1) periods when the cupola blast air is turned off;
(2) periods when the blast air has been turned on for less than 30 consecutive minutes
(3) during the last 30 minutes of operation of the cupola before the blast air is turned off.

The Permittee shall monitor the times that the cupola blast air is turned on and off.

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

D.1.15 Record Keeping Requirement

(a) To document compliance with Condition D.1.1(a), the Permittee shall maintain records of the iron throughput to Hunter #1 mold line.

(b) To document compliance with Condition D.1.1(e), the Permittee shall maintain records of the iron throughput to Sinto #1 mold line.

(c) To document compliance with Condition D.1.5,

(1) The Permittee shall maintain records of the metal or sand throughput as applicable to the following listed operations in tons per month

Charge handling operation
Induction furnace #1
Induction furnace #2
Hunter #1
Hunter #2
Hunter #5
Hunter #6
Sinto #1
Shakeout system for all mold lines
Shell core machines
Isocure core machines
Shot #1
Shot #2
Shot #3
Grinding and finishing

(2) Total HAPs emissions as per equations listed in Condition D.1.9(1)

(3) Benzene emissions as per equations listed in Condition D.1.9(2)(a)

(4) Manganese emissions as per equations listed in Condition D.1.9(2)(b)

(d) To document compliance with Condition D.1.10, the Permittee shall maintain a log of daily visible emission notations of stack exhaust from the following:

Emission Unit	Control Device
Isocure core sand handling	Bin Vent Filter #3

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, (i.e. the process did not operate that day).

(e) To document compliance with Condition D.1.11, the Permittee shall maintain records of the pressure drop readings across the following once per day during normal operation:

(1) DC 1,
(2) DC 2, and
(3) Wet scrubber.

The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).

(f) To document compliance with Condition D.1.14, the Permittee shall maintain the continuous temperature records for the afterburner (3-hour rolling average) and the times when the cupola blast air is turned on and off.

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

D.1.16 Reporting Requirements

A quarterly summary of the information to document the compliance status with Conditions D.1.1(a), D.1.1(e), and D.1.5 shall be submitted 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(35).

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Insignificant Activities:

(a) Thirty-seven (37) natural gas-fired combustion sources consisting of:

Emission Unit	Year of Construction	Capacity (MMBtu/hr)	Direct/ Indirect	Exhausted
Gas heaters				
Gas #01	1972	1.5	Indirect	Stack
Gas #02	1995		Indirect	Stack
Gas #03	1995		Indirect	Stack
Gas #04	1995		Indirect	Stack
Gas #05	1996		Indirect	Stack
Gas #06	1996		Indirect	Stack
Gas #07	1995		Indirect	Stack
Gas #08	1972		Indirect	Stack
Gas #09	1995		Indirect	Stack
Gas #10	1995		Indirect	Stack
Gas #11	1972		Indirect	Stack
Gas #12	1996		Indirect	Stack
Gas #13	1972		Indirect	Stack
Infra Heaters				
Infra #01IR	2002	0.737	Indirect	Indoors
Infra #02IR	2002		Indirect	Indoors
Infra #05IR	1998		Indirect	Indoors
Infra #06IR	1998		Indirect	Indoors
Infra #07IR	1995		Indirect	Indoors
Infra #08IR	1995		Indirect	Indoors
Infra #09IR	1995		Indirect	Indoors
Infra #10IR	1995		Indirect	Indoors
Infra #11IR	1995		Indirect	Indoors
Infra #12IR	1990		Indirect	Indoors
Infra #13IR	1990		Indirect	Indoors
Infra #14IR	1992		Indirect	Indoors
Infra #15IR	1990		Indirect	Indoors
Infra #16IR	1985		Indirect	Indoors
Tube Heaters				
Tube #01TIR	1980	0.6	Indirect	Indoors

	Tube #02TIR	1980		Indirect	Indoors
	Tube #03TIR	1980		Indirect	Indoors
	Tube #04TIR	1980		Indirect	Indoors
	Tube #05TIR	1980		Indirect	Indoors
	Tube #06TIR	1980		Indirect	Indoors
	Core oven	1971	0.51	Indirect	Stack
	Pan heater #1	1998	2.4	Indirect	Stack
	Pan heater #2	2002		Indirect	Stack
	Hot blast heater (for cupola combustion air)	1972	5.2	Indirect	Stack

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

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

D.2.1 Particulate Emission Limitations for Sources of Indirect Heating [326 IAC 6-2]

(a) Pursuant to 326 IAC 6-2-3(d), the PM emissions from the core oven at the source, shall not exceed 0.8 pounds per MMBtu heat input.

(b) Pursuant to 326 IAC 6-2-4, the PM emissions from the following listed units, shall not exceed pounds per MMBtu heat input as specified:

Emission Unit	Limit (lb PM/ MMBtu)
Gas heaters	
Gas #01	0.6
Gas #02	0.6
Gas #03	0.6
Gas #04	0.6
Gas #05	0.6
Gas #06	0.6
Gas #07	0.6
Gas #08	0.6
Gas #09	0.6
Gas #10	0.6
Gas #11	0.6
Gas #12	0.6
Gas #13	0.6
Infra Heaters	
Infra #01IR	0.59
Infra #02IR	0.59
Infra #05IR	0.6
Infra #06IR	0.6
Infra #07IR	0.6

Emission Unit	Limit (lb PM/ MMBtu)
Infra #08IR	0.6
Infra #09IR	0.6
Infra #10IR	0.6
Infra #11IR	0.6
Infra #12IR	0.6
Infra #13IR	0.6
Infra #14IR	0.6
Infra #15IR	0.6
Infra #16IR	0.6
Tube Heaters	
Tube #01TIR	0.6
Tube #02TIR	0.6
Tube #03TIR	0.6
Tube #04TIR	0.6
Tube #05TIR	0.6
Tube #06TIR	0.6
Pan heater #1	0.6
Pan heater #2	0.59
Hot blast heater (for cupola combustion air)	0.6

D.2.2 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan (PMP) is required for these facilities and their control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

SECTION E.1 NESHAP

Emissions Unit Description:

Entire Source

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

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

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

(a) Pursuant to 40 CFR 63.1 the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1, for the emission unit(s) listed above, except as otherwise specified in 40 CFR Part 63, Subpart ZZZZZ.

(b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports to:

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

E.1.2 Iron and Steel Foundries Area Sources NESHAP [40 CFR Part 63, Subpart ZZZZZ] [326 IAC 20-92]

The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart ZZZZZ (included as Attachment A to the operating permit), which are incorporated by reference as 326 IAC 20-92 for the emission units listed above:

(1) 40 CFR 63.10880(a),(b)(1),(f)
(2) 40 CFR 63.10881(a)(1)-(3), (d)(2)
(3) 40 CFR 63.10885(a)(1),(a)(2)(i)-(ii),(b)(4)
(4) 40 CFR 63.10886
(5) 40 CFR 63.10890(a),(b),(c)(1)-(3),(d),(e)(1)-(2)&(5)(7),(f),(g),(i)
(6) 40 CFR 63.10895(a),(b),(c)(1)-(2),(e)
(7) 40 CFR 63.10896(a)(1)-(5),(b)
(8) 40 CFR 63.10897(a)(1)(i)-(ii),(a)(4)(i)-(iii),(e)-(h)
(9) 40 CFR 63.10898(a)(1)-(3),(b)-(j),(l)(1)-(3)
(10) 40 CFR 63.10899(a),(b)(1),(b)(4)-(8),(b)(10)-(12),(b)(13)(i)-(iii),(c)(1)-(3),(d)
(11) 40 CFR 63.10900(a),(b)
(12) 40 CFR 63.10905
(13) 40 CFR 63.10906

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

E.1.3 Testing Requirements [326 IAC 2-1.1-11] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

In order to document the compliance status with Condition E.1.2, the Permittee shall perform the testing required under 40 CFR 63, Subpart ZZZZZ, utilizing methods as approved by the Commissioner, at least once every five (5) years from the date of the most recent valid compliance demonstration. Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
PART 70 OPERATING PERMIT
CERTIFICATION

Source Name: Bremen Castings, Inc.
Source Address: 500 North Baltimore Street, Bremen, Indiana 46506
Part 70 Permit No.: T099-37432-00001

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:

DRAFT

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: Bremen Castings, Inc.
Source Address: 500 North Baltimore Street, Bremen, Indiana 46506
Part 70 Permit No.: T099-37432-00001

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**) daytime 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
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: Bremen Castings, Inc.
Source Address: 500 North Baltimore Street, Bremen, Indiana 46506
Part 70 Permit No.: T099-37432-00001
Facility: Hunter #1 mold line
Parameter: Iron throughput
Limit: The amount of iron throughput to Hunter #1 mold line shall not exceed 30,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

QUARTER: _____ YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month (tons)	Previous 11 Months (tons)	12 Month Total (tons)

☐ 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: Bremen Castings, Inc.
Source Address: 500 North Baltimore Street, Bremen, Indiana 46506
Part 70 Permit No.: T099-37432-00001
Facility: Sinto #1
Parameter: Iron Throughput
Limit: The amount of iron throughput to Sinto #1 mold line shall not exceed 30,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

QUARTER: _____ YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month (tons)	Previous 11 Months (tons)	12 Month Total (tons)

☐ 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: Bremen Castings, Inc.
Source Address: 500 North Baltimore Street, Bremen, Indiana 46506
Part 70 Permit No.: T099-37432-00001
Facility: Charge handling operation, cupola, induction furnace # 1, induction furnace #2, Hunter #1, Hunter #2, Hunter #5, Hunter #6,Sinto #1, shakeout system for all mold lines, shell core machines, isocure #1, isocure #2, isocure #3, shot #1, shot #2, shot #3, and grinding and finishing.
Parameter: Total HAPs
Limit: The total emissions of any combinations of HAPs from charge handling operation, cupola, induction furnace # 1, induction furnace #2, Hunter #1, Hunter #2, Hunter #5, Hunter #6,Sinto #1, shakeout system for all mold lines, shell core machines, isocure #1, isocure #2, isocure #3, shot #1, shot #2, shot #3, and grinding and finishing, shall be limited such that the potential to emit (PTE) of combination of all Hazardous Air Pollutants (HAPs) shall not exceed 24.60 tons per twelve (12) consecutive month period with compliance determined at the end of the month.

QUARTER: _____ YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month (tons)	Previous 11 Months (tons)	12 Month Total (tons)

☐ 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: Bremen Castings, Inc.
Source Address: 500 North Baltimore Street, Bremen, Indiana 46506
Part 70 Permit No.: T099-37432-00001
Facility: Hunter #1, Hunter #2, Hunter #5, Hunter #6, and Sinto #1
Parameter: Single HAP - Benzene
Limit: The total emission of Benzene from the following operations:

Hunter #1
Hunter #2
Hunter #5
Hunter #6
Sinto #1

shall be limited such that the potential to emit (PTE) of Benzene shall not exceed 9.90 tons per twelve (12) consecutive month period with compliance determined at the end of the month.

QUARTER: _____ YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month (tons)	Previous 11 Months (tons)	12 Month Total (tons)

☐ 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: Bremen Castings, Inc.
Source Address: 500 North Baltimore Street, Bremen, Indiana 46506
Part 70 Permit No.: T099-37432-00001
Facility: Charge handling operation, cupola, induction furnace # 1, induction furnace #2, Hunter #1, Hunter #2, Hunter #5, Hunter #6, Sinto #, shakeout system for all mold lines, shot #1, shot #2, shot #3, and grinding and finishing.
Parameter: Single HAP - Manganese
Limit: The total emission of Manganese from the charge handling operation, cupola, induction furnace # 1, induction furnace #2, Hunter #1, Hunter #2, Hunter #5, Hunter #6, Sinto #, shakeout system for all mold lines, shot #1, shot #2, shot #3, and grinding and finishing, shall be limited such that the potential to emit (PTE) of Manganese shall not exceed 9.90 tons per twelve (12) consecutive month period with compliance determined at the end of the month.

QUARTER: _____ YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month (tons)	Previous 11 Months (tons)	12 Month Total (tons)

☐ 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: Bremen Castings, Inc.
Source Address: 500 North Baltimore Street, Bremen, Indiana 46506
Part 70 Permit No.: T099-37432-00001

Months: _____ to _____ Year: _____

This report shall be submitted quarterly based on a calendar year. Proper notice submittal under Section B –Emergency Provisions satisfies the reporting requirements of paragraph (a) of Section C-General Reporting. 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

Part 70 Operating Permit Renewal No: T 099-37432-00001

[Downloaded from the eCFR on March 24, 2014]

Electronic Code of Federal Regulations

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 (Ep) for each test run using Equation 1 of this section:

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

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.

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

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.

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

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:

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

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.

For. . .	You must. . .	According to the following requirements. . .
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 §63.10895(d)(2) for voltage and secondary current (or total power input).	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 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

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

Source Description and Location

Source Name:	**Bremen Castings, Inc.**
Source Location:	**500 North Baltimore Street, Bremen, Indiana 46506**
County:	**Marshall**
SIC Code:	**3321 (Gray and Ductile Iron Foundries)**
Permit Renewal No.:	**T099-37432-00001**
Significant Source Modification No.:	**099-39928-00001**
Permit Reviewer:	**Rithika Reddy**

On July 26, 2016, Bremen Castings, Inc. submitted an application to the Office of Air Quality (OAQ) requesting to renew its operating permit. OAQ has reviewed the operating permit renewal application from Bremen Castings, Inc. relating to the operation of a stationary gray and ductile iron castings manufacturing plant. Bremen Castings, Inc. was issued its second Part 70 Operating Permit Renewal No. T099-30729-00001 on April 27, 2012.

In addition, during the review of the renewal application, it was discovered that a shot blast machine, was constructed in 2012, replacing an existing shot blast machine. Bremen Castings Inc. was informed to submit an application to satisfy the air permitting requirements for this shot blast machine. On April 27, 2018, Bremen Castings, Inc. submitted an application (Significant Source Modification (SSM) 099-39928-00001) relating to the replacement of the existing shot blast machine. For the purpose of this permitting action, in lieu of issuing a separate permit modification associated with the SSM application (099-39928-00001), the operating conditions for the shot blast machine will be specified in the Part 70 Operating Permit Renewal application (T099-37432-00001).

Permitted Emission Units and Pollution Control Equipment

Descriptions of emissions units have been revised to provide clarity.

The source consists of the following permitted emission units:

(a) One (1) charge handling operation for charge materials for melting furnaces, constructed in 1972, with a nominal capacity of 15.4 tons of metal per hour, uncontrolled, and exhausting indoors.

(b) One (1) cupola melting operation consisting of the following:

(1) One (1) cupola furnace, identified as CUPOLA, constructed in 1972, with a nominal capacity of 14 tons of metal per hour, exhausting to stack DS-9, and equipped with the following controls:

(a) One (1) natural gas fired cupola afterburner for CO, VOC and organic HAPs emissions control, with a maximum capacity of 4.3 MMBtu per hour,

(b) One (1) wet scrubber for particulate, VOC and HAPs emissions control, identified as WS#1, and

(c) One (1) wet electrostatic precipitator for particulate matter control, identified as WESP.

The above mentioned controls are existing control devices. The WESP was added during permit renewal No. 099-30729-00001, issued on April 27, 2012. This renewal clarified the pollutants being controlled by control devices.

(2) One (1) electric induction holding furnace for holding molten metal from the cupola furnace, constructed in 1988, with a nominal capacity of 40 tons per hour, uncontrolled, and exhausting indoors.

(3) Ladles for pouring molten metal into the molds, uncontrolled, and exhausting indoors.

(c) One (1) electric induction furnace (EIF) melting operation consisting of the following:

(1) Two (2) electric induction furnaces, identified as #1 and #2, each constructed in 1995, modified in 2004, each with a nominal capacity of 4 tons of metal per hour, using a common baghouse for particulate control, identified as DC-2, and exhausting to stack DC-2;

(2) One (1) inoculation operation for magnesium treatment of the molten metal from the electric induction furnaces to produce ductile iron, constructed prior to 1977, with a maximum capacity of 8 tons per hour, uncontrolled, and exhausting indoors, using one of the following:

(a) Flotret method of magnesium treatment, or

(b) Tundish ladle method of magnesium treatment.

This inoculation operation was modified in 2007 to include the tundish ladle method of magnesium treatment.

(3) Ladles for pouring molten metal into the molds, uncontrolled, exhausting indoors.

(d) Five (5) mold making lines, with a combined nominal metal throughput capacity of 20 tons per hour, and a combined green sand throughput of 100 tons per hour, uncontrolled, and consisting of the following:

(1) One (1) mold line, identified as Hunter #1, constructed in 2002, exhausting to three (3) stacks, and consisting of the following:

(A) One (1) mold making machine; and

(B) One (1) pouring and cooling operation, with a nominal metal throughput of 4 tons per hour.

(2) One (1) mold line, identified as Hunter #2, constructed in 1974, modified in 2005, exhausting to three (3) stacks, and consisting of the following:

(A) One (1) mold making machine; and

(B) One (1) pouring and cooling operation, with a nominal metal throughput of 4 tons per hour.

(3) One (1) mold line, identified as Hunter #5, constructed in 1979, exhausting to one (1) stack, and consisting of the following:

(A) One (1) mold making machine; and

(B) One (1) pouring and cooling operation, with a nominal metal throughput of 3 tons per hour.

(4) One (1) mold line, identified as Hunter #6, constructed in 1981, exhausting to one (1) stack, and consisting of the following:

(A) One (1) mold making machine; and

(B) One (1) pouring and cooling operation, with a nominal metal throughput of 3 tons per hour.

(5) One (1) mold making line, identified as Sinto #1, constructed in 1998, exhausting to three (3) stacks, and consisting of the following:

(A) One (1) mold making machine; and

(B) One (1) pouring and cooling operation, with a nominal metal throughput of 6 tons per hour.

(e) One (1) mold sand handling system for all mold making lines, constructed in 1975, with a nominal sand throughput of 100 tons per hour, using a common baghouse for particulate control, identified as DC-2, exhausting to stack DC-2, and consisting of:

(1) one (1) shakeout system (including one (1) shaker pan and one (1) rotary shakeout)
(2) one (1) sand muller,
(3) two (2) silos,
(4) two (2) sand storage tanks,
(5) two (2) elevators,
(6) conveyors,
(7) one (1) magnetic separator,
(8) one (1) sand cooler,
(9) one (1) sand screen, and
(10) one (1) recycle sand hopper.

(f) One (1) shell core making process, with a total nominal capacity of 0.7 tons of cores per hour, consisting of the following seven (7) natural gas fired shell core machines, uncontrolled, and exhausting to two (2) stacks, identified as RE-19 and RE-20:

Emission Unit ID	Year of Construction	Maximum capacity (MMBtu/hr)
#1, #2, #3	1964	0.15 each
#4	1972	0.15
#5, #6	1970	0.125 each
#7	1963	0.093

(g) One (1) isocure core making process consisting of the following:

(1) One (1) New Sand Silo, with a nominal capacity of 3 tons of sand per hour, and exhausting through Bin Vent #3 to stack BV-3.

(2) One (1) sand mixer, constructed in 2007, with a nominal capacity of 3 tons of sand per hour, and exhausting through Bin Vent #4 inside the building.

(3) Three (3) phenolic urethane isocure core machines, identified as Isocure #1, Isocure #2 and Isocure #3, constructed in 1978, 1978, and 2002, respectively, each with a nominal capacity of 1.0 ton of cores per hour, uncontrolled, and exhausting to one (1) common stack, identified as DS-12.

(4) Two (2) working core storage areas, uncontrolled, and exhausting to stacks EF-1 and EF-2.

(h) Three (3) shot blasting operations with a combined maximum throughput of 8.4 tons per hour, consisting of the following:

(1) One (1) shot blast machine, identified as Shot #1, constructed in 1944, with a maximum capacity of 4.2 tons per hour, using a baghouse for particulate control, identified as DC-1, and exhausting to stack DC-1.

(2) One (1) shot blast machine, identified as Shot #2, constructed in 2012, with a maximum capacity of 4.2 tons per hour, using a baghouse for particulate control, identified as DC-1, and exhausting to stack DC-1.

This shot blast machine replaced an existing shot blast machine that was constructed in 1963.

(3) One (1) shot blast machine, identified as Shot #3, constructed in 1974, with a maximum capacity of 4.2 tons per hour, using a baghouse for particulate control, identified as DC-1, and exhausting to stack DC-1.

(i) One (1) grinding and finishing process, consisting of the following grinders, with a combined metal throughput capacity of 8.4 tons per hour, using a baghouse for particulate control, identified as DC-1, and exhausting to stack DC-1.

Emission Unit ID	Year of Construction	Throughput capacity (tons per hour)
Grinders #1-#6	1987	8.4
Grinder #7	2000	
Robotic grinder Foxall #10	2005	
Barinder #1-#2	2010	
Robotic grinding cell #1 (Robots #1-#2)	2013	
Robotic grinding cell #2 (Robots #3-#4)	2013	

The shot blasting operations and the grinding and finishing process share a baghouse, DC-1, and exhaust to one (1) common stack DC-1.

(j) One (1) 3-D printer, identified as Printer #1, used for making Furan no-bake cores and molds, constructed in 2017, with a maximum throughput of 830.37 tons of sand per year, uncontrolled, and exhausting indoors.

Emission Units and Pollution Control Equipment Constructed and/or Operated without a Permit

The source has constructed and operated the following emission unit without a permit at the time of the review.

(a) One (1) shot blast machine, identified as Shot #2, constructed in 2012, with a maximum capacity of 4.2 tons per hour, using a baghouse for particulate control, identified as DC-1, and exhausting to stack DC-1.

Emission Units and Pollution Control Equipment Removed From the Source

The source has removed the following emission units:

(a) Two grinders, identified as Grinder #8 and Grinder #9, part of the grinding and finishing process, using a baghouse for particulate control, identified as DC-1, and exhausting through one (1) stack, identified as DC-1.

The grinding and finishing process consists of other grinders and robotic grinding cells. The combined throughput to the grinding and finishing process is 8.4 tons per hour. The removal of these two grinders does not modify the throughput capacity of the grinding and finishing process and therefore, does not decrease the potential emissions.

Insignificant Activities

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

(a) Thirty-seven (37) natural gas-fired combustion sources consisting of:

Emission Unit	Year of Construction	Capacity (MMBtu/hr)	Direct/ Indirect	Exhausted
Gas heaters				
Gas #01	1972	1.5	Indirect	Stack
Gas #02	1995		Indirect	Stack
Gas #03	1995		Indirect	Stack
Gas #04	1995		Indirect	Stack
Gas #05	1996		Indirect	Stack
Gas #06	1996		Indirect	Stack
Gas #07	1995		Indirect	Stack
Gas #08	1972		Indirect	Stack
Gas #09	1995		Indirect	Stack
Gas #10	1995		Indirect	Stack
Gas #11	1972		Indirect	Stack
Gas #12	1996		Indirect	Stack
Gas #13	1972		Indirect	Stack
Infra Heaters				
Infra #01IR	2002	0.737	Indirect	Indoors

Emission Unit	Year of Construction	Capacity (MMBtu/hr)	Direct/ Indirect	Exhausted
Infra #02IR	2002		Indirect	Indoors
Infra #05IR	1998		Indirect	Indoors
Infra #06IR	1998		Indirect	Indoors
Infra #07IR	1995		Indirect	Indoors
Infra #08IR	1995		Indirect	Indoors
Infra #09IR	1995		Indirect	Indoors
Infra #10IR	1995		Indirect	Indoors
Infra #11IR	1995		Indirect	Indoors
Infra #12IR	1990		Indirect	Indoors
Infra #13IR	1990		Indirect	Indoors
Infra #14IR	1992		Indirect	Indoors
Infra #15IR	1990		Indirect	Indoors
Infra #16IR	1985		Indirect	Indoors
Tube Heaters				
Tube #01TIR	1980	0.6	Indirect	Indoors
Tube #02TIR	1980		Indirect	Indoors
Tube #03TIR	1980		Indirect	Indoors
Tube #04TIR	1980		Indirect	Indoors
Tube #05TIR	1980		Indirect	Indoors
Tube #06TIR	1980		Indirect	Indoors
Core oven	1971	0.51	Indirect	Stack
Pan heater #1	1998	2.4	Indirect	Stack
Pan heater #2	2002		Indirect	Stack
Hot blast heater (for cupola combustion air)	1972	5.2	Indirect	Stack

(2) This stationary source also includes the following insignificant activities which are not specifically regulated, as defined in 326 IAC 2-7-1(21):

(a) Twelve (12) natural gas-fired combustion sources consisting of:

Emission Unit	Year of Construction	Capacity (MMBtu/hr)	Direct/ Indirect	Exhausted
Dock Heaters				
Dock #01	1988	3.0	Direct	Indoors
Dock #02	1988		Direct	Indoors
Dock #03	1995		Direct	Indoors
Dock #04	1978		Direct	Indoors
Air make-up units				

Emission Unit	Year of Construction	Capacity (MMBtu/hr)	Direct/ Indirect	Exhausted
AMU #1	1996	25.9	Direct	Indoors
AMU #2	1996		Direct	Indoors
AMU #3	1963		Direct	Indoors
AMU #4	1995		Direct	Indoors
AMU #5	1963		Direct	Indoors
AMU #6	1963		Direct	Indoors
Didion inlet	1995	1.3	Direct	DC-2

(b) Paved and unpaved roads and parking lots with public access

Existing Approvals

The source was issued Part 70 Permit Renewal No. T099-30729-00001 on April 27, 2012. The source has since received the following approvals:

(a) Significant Permit Modification No.: 099-34466-00001, issued on December 24, 2014.

(b) Administrative Amendment No.: 099-38977-00001, issued on November 02, 2017.

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

County Attainment Status

The source is located in Marshall County.

Pollutant	Designation
SO_2	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O_3	Unclassifiable or attainment effective July 20, 2012, for the 2008 8-hour ozone standard.[1]
$PM_{2.5}$	Unclassifiable or attainment effective April 5, 2005, for the annual $PM_{2.5}$ standard.
$PM_{2.5}$	Unclassifiable or attainment effective December 13, 2009, for the 24-hour $PM_{2.5}$ standard.
PM_{10}	Unclassifiable effective November 15, 1990.
NO_2	Cannot be classified or better than national standards.
Pb	Unclassifiable or attainment effective December 31, 2011.
[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 (NO_x) 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 NO_x emissions are considered when evaluating the rule applicability relating to ozone. Marshall County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) $PM_{2.5}$
Marshall County has been classified as attainment for $PM_{2.5}$. Therefore, direct $PM_{2.5}$, SO_2, and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(c) Other Criteria Pollutants
Marshall County has been classified as attainment or unclassifiable in Indiana for all the other criteria pollutants. 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 secondary metal production plant, it is considered one (1) 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.

Greenhouse Gas (GHG) Emissions

On June 23, 2014, in the case of *Utility Air Regulatory Group v. EPA*, cause no. 12-1146, (available at http://www.supremecourt.gov/opinions/13pdf/12-1146_4g18.pdf) the United States Supreme Court ruled that the U.S. EPA does not have the authority to treat greenhouse gases (GHGs) as an air pollutant for the purpose of determining operating permit applicability or PSD Major source status. On July 24, 2014, the U.S. EPA issued a memorandum to the Regional Administrators outlining next steps in permitting decisions in light of the Supreme Court's decision. U.S. EPA's guidance states that U.S. EPA will no longer require PSD or Title V permits for sources "previously classified as 'Major' based solely on greenhouse gas emissions."

The Indiana Environmental Rules Board adopted the GHG regulations required by U.S. EPA at 326 IAC 2-2-1(zz), pursuant to Ind. Code § 13-14-9-8(h) (Section 8 rulemaking). A rule, or part of a rule, adopted under Section 8 is automatically invalidated when the corresponding federal rule, or part of the rule, is invalidated. Due to the United States Supreme Court Ruling, IDEM, OAQ cannot consider GHG emissions to determine operating permit applicability or PSD applicability to a source or modification.

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

Unrestricted Potential Emissions	
Pollutant	Tons/year
PM	4,456
PM_{10}	1,600
$PM_{2.5}$	1,600
SO_2	58
NO_x	28
VOC	175
CO	9,434
Single HAP	65

Unrestricted Potential Emissions	
Pollutant	Tons/year
Total HAP	107

HAPs	tons/year
Manganese	65
Benzene	14.5
Lead	8
Toluene	4
Phenol	3.6
Antimony	3.5
Nickel	1.27
All other HAPs	7.13
Total	**107**

Appendix A of this TSD reflects the unrestricted potential emissions of the source.

(a) The potential to emit (as defined in 326 IAC 2-7-1(30)) of PM10, PM2.5, VOC, and CO is greater than one hundred (100) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7 and will be issued a Part 70 Operating Permit Renewal.

(b) The potential to emit (as defined in 326 IAC 2-7-1(30)) of any single HAP is greater than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(30)) of a combination of HAPs is greater than twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7 and will be issued a Part 70 Operating Permit Renewal.

Part 70 Permit Conditions

This source is subject to the requirements of 326 IAC 2-7, because the source met the following:

(a) Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance of Part 70 permits.

(b) Monitoring and related record keeping requirements which assume that all reasonable information is provided to evaluate continuous compliance with the applicable requirements.

Description of Proposed Modification

The Office of Air Quality (OAQ) has reviewed an application, submitted by Bremen Castings, Inc. on April 27, 2018, requesting the operation of one (1) unpermitted shot blast machine, identified as Shot #2, constructed in 2012. Bremen Castings, Inc. replaced the existing shot blast machine, identified as Shot #2, constructed in 1963, with the new shot blast machine in 2012. The new shot blast machine will have the same nomenclature as the old shot blast machine.

(a) One (1) shot blast machine, identified as Shot #2, constructed in 2012, with a maximum capacity of 4.2 tons per hour, using a baghouse for particulate control, identified as DC-1, and exhausting to stack DC-1.

Enforcement Issue

IDEM is aware that equipment has been constructed and operated prior to receipt of the proper permit. The subject equipment is listed in this Technical Support Document under the condition entitled “Emission Units and Pollution Control Equipment Constructed and/or Operated without a Permit.”

(a) IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

Emission Calculations

See Appendix A of this document for detailed emission calculations.

Permit Level Determination – Part 70 Modification to an Existing Source

Pursuant to 326 IAC 2-1.1-1(12), 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 and 326 IAC 2-7-11. This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit. If the control equipment has been determined to be integral, the table reflects the PTE after consideration of the integral control device.

	PTE Before Controls of the New Emission Unit (tons/year)									
Process / Emission Unit	**PM**	**PM_{10}**	**$PM_{2.5}$**	**SO_2**	**NO_x**	**VOC**	**CO**	**Pb**	**Single HAP (Mn)**	**Combined HAPs**
Shot #2	285.14	29.43	29.43	-	-	-	-	1.09	8.84	10.8
Total:	**285.14**	**29.43**	**29.43**	**-**	**-**	**-**	**-**	**1.09**	**8.84**	**10.8**

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

(a) Approval to Construct

(1) Pursuant to 326 IAC 2-7-10.5(g)(3), a Significant Source Modification is required because this modification has the potential to emit lead (Pb) at greater than or equal to one (1) ton per year.

(2) Pursuant to 326 IAC 2-7-10.5(g)(4), a Significant Source Modification is required because this modification has the potential to emit PM, PM10, and PM2.5 at greater than twenty-five (25) tons per year.

(b) Approval to Operate

Pursuant to 326 IAC 2-7-12(d)(1), this change to the permit is being made through a Significant Permit Modification because this modification does not qualify as a Minor Permit Modification or as an Administrative Amendment. This modification involves adding new PSD minor limits.

Permit Level Determination – Actual to Projected Actual (ATPA) Emissions Test

2012 shot blast machine, Shot #2

(a) Actual to Projected Actual (ATPA) Applicability Test

The source opted to use the Actual to Projected Actual (ATPA) test, specified in 326 IAC 2-2-2(d)(3), to demonstrate that the modification is not subject to PSD major review. This is used because the emission unit involved in this modification is an emission unit used to replace and existing emission unit. Pursuant to 326 IAC 2-2-1(t)(2), a replacement unit is considered an existing unit.

There are no new emissions units involved in this modification.

The source has provided information and emission calculations as part of the application for this ATPA test. IDEM, OAQ reviewed the emission calculations provided by the source to verify the emissions factors and methodology used, but has not made any determination regarding the validity and accuracy of certain information such as actual throughput, actual usage and actual hours of operation.

The source will be required to keep records and report in accordance with the requirements of 326 IAC 2-2-8 (Prevention of Significant Deterioration (PSD) Requirements: Source Obligation).

(b) Existing Emissions Units Affected by the Modification Only

This project involves existing emission units affected by the modification only. The following emissions units will be considered existing for the purpose of ATPA:

(1) The new emission units, which are replacing existing emissions units, which are nearly equal capacity that serves the same purpose without increasing the emissions. A replacement emissions unit is an existing emissions unit. [326 IAC 2-2-1(t)(2)].
(2) Modified emissions units.
(3) Emissions Units that will not be modified; however, they will experience increased or decreased utilization as part of this project.

The following emissions unit will be considered as existing emissions unit for this evaluation

One (1) shot blast machine, identified as Shot #2, with a maximum capacity of 4.2 tons per hour, replacing an existing shot blast machine of the same maximum capacity of 4.2 tons per hour and serving the same purpose.

The existing shot blast machine unit was constructed in 1963 and the replacement shot blast unit machine (Shot #2) was constructed in 2012.

Table 1 below is the unlimited uncontrolled PTE of the replacement shot blast machine (Shot #2).

Table 1 – Uncontrolled PTE (tons/year)

PM	PM_{10}	$PM_{2.5}$*	SO_2	NO_X	VOC	CO	Pb
285.14	29.43	29.43	-	-	-	-	1.09
*PM2.5 listed is direct PM2.5.							

(c) Baseline Actual Emissions

Table 2 below shows the actual emissions of the shot blast machine that was replaced

The baseline actual emissions from the shot blast machine involved in this ATPA applicability test are based on its emissions from 2011 through 2012.

Table 2 – Actual Emissions (tons/year)											
Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Baseline Actual Emissions
PM	5.65	4.07	5.21	6.56	5.45	4.55	4.39	3.88	4.12	4.39	6.01
PM10 = PM2.5	0.57	0.41	0.52	0.66	0.55	0.46	0.44	0.39	0.41	0.44	0.61
Lead	0.022	0.016	0.02	0.025	0.021	0.017	0.016	0.015	0.016	0.016	0.023

(d) Actual to Projected Actual (ATPA) Summary

Since this project only involves existing emissions units, an Actual to Projected Actual (ATPA) applicability test, specified in 326 IAC 2-2-2(d)(3) is used to determine if the project results in a significant emissions increase. The emissions increase of the project is the sum of the difference between the projected actual emissions and the baseline emissions for each existing emissions unit.

However, pursuant to 326 IAC 326 IAC 2-2 (pp)(2)(A), projected actual emissions can be determined only before beginning actual construction. The shot blast machine was replaced in 2012 and has begun actual construction. Pursuant to 326 IAC 326 IAC 2-2 (pp)(2)(B), in lieu of using the projected actual emissions, the PTE as defined under 326 IAC 326 IAC 2-2-1 (ll) may be used. This PTE is the limited PTE that is enforceable as a practical matter.

The addition of the replacement shot blast unit will not result in upstream or downstream increase in utilization.

Project Emissions (tons/year)									
Process/Emission Unit	**PM**	**PM_{10}**	**$PM_{2.5}$***	**SO_2**	**NO_X**	**VOC**	**CO**	**GHGs**	**Pb**
Shot #2	24.88	14.89	9.80	-	-	-	-	-	0.59
Significant Levels	25	15	10	40	40	40	100	75,000 CO_2e	0.6
*PM2.5 listed is direct PM2.5.									

The following limits are specified in order to render the requirements of 326 IAC 2-2 not applicable to Shot #2:

(1) The PM emissions after control (DC-1) from the shot blast machine, Shot #2, shall not exceed 5.68 pounds per hour.

(2) The PM10 emissions after control (DC-1) from the shot blast machine, Shot #2, shall not exceed 3.40 pounds per hour.

(3) The PM2.5 emissions after control (DC-1) from the shot blast machine, Shot #2, shall not exceed 2.24 pounds per hour.

(4) The Pb emissions after control (DC-1) from the shot blast machine, Shot #2, shall not exceed 0.134 pounds per hour.

(e) Conclusion

Based on this applicability test, this proposed modification is not subject to PSD major review under 326 IAC 2-2-1, because the project emissions are less than the significance levels (i.e., the modification does not cause a significant emissions increase).

Potential to Emit After Issuance

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

Process/ Emission Unit	Potential To Emit of the Entire Source After Issuance (tons/year)								
	PM	PM_{10}*	$PM_{2.5}$**	SO_2	NO_x	VOC	CO	Total HAPs	Worst Single HAP
Charge Handling Operation	40.47	24.28	24.28	-	-	-	-	(1)	Mn (2)
Cupola	846.22	760.37	760.37	55.19	6.13	11.04	8,891.40	(1)	Mn (2)
Inoculation (Mg treatment)	63.07	63.07	63.07	-	-	-	-	-	-
Induction Furnace #1	15.77	15.07	15.07	-	-	-	-	(1)	Mn (2)
Induction Furnace #2	15.77	15.07	15.07	-	-	-	-	(1)	Mn (2)
Hunter #1	22.50(4)	14.85(4)	14.85(4)	0.35	0.18	2.45	90.0(4)	(1)	Benzene (3)
Hunter #2	26.28	26.28	26.28	0.35	0.18	2.45	105.12		
Hunter #5	19.71	19.71	19.71	0.26	0.13	1.84	78.84		
Hunter #6	19.71	19.71	19.71	0.26	0.13	1.84	78.84		
Sinto #1	22.50(4)	14.85(4)	14.85(4)	0.53	0.26	3.68	90.0(4)		
Shakeout for all Mold Lines	280.32	196.22	196.22	-	-	105.12	-		
Mold Sand Handling	1,576.8	236.52	236.52	-	-	-	-	-	-
Shell Core Machines	-	-	-	0.98	1.53	6.13	-	(1)	0.74 Phenol
Shell Core Sand Handling	11.04	1.66	1.66	-	-	-	-	-	-
Isocure Core Machines	-	-	-	-	-	38.40	-	(1)	0.29 Napthalene
Isocure Core Sand Handling	47.30	7.10	7.10	-	-	-	-	-	-
Shot #1	285.14	29.43	29.43	-	-	-	-	(1)	Mn (2)
Shot #2	24.88(4)	14.89(4)	9.81(4)	-	-	-	-		
Shot #3	285.14	29.43	29.43	-	-	-	-		
Grinding and Finishing	24.88(4)	14.89(4)	14.89(4)	-	-	-	-		
3-D Printer (Core Making)	-	-	-	-	-	0.49	-	-	-
Sand Handling for 3-D Printer	1.49	0.22	0.22	-	-	-	-	-	-
Natural Gas Combustion	0.38	1.51	1.51	0.12	19.92	1.10	16.73	0.38	0.36 Hexane
Total PTE of Entire Source	**3,629**	**1,505**	**1,500**	**58**	**28**	**175**	**9,351**	**<24.98**	**<9.99 (2)(3)**
Title V Major Source Thresholds	NA	100	100	100	100	100	100	25	10
PSD Major Source Thresholds	100	100	100	100	100	100	100	NA	NA

Process/ Emission Unit	Potential To Emit of the Entire Source After Issuance (tons/year)								
	PM	PM_{10}*	$PM_{2.5}$**	SO_2	NO_x	VOC	CO	Total HAPs	Worst Single HAP

* Under the Part 70 Permit program (40 CFR 70), PM10 and PM2.5, not particulate matter (PM), are each considered as a "regulated air pollutant".
**$PM_{2.5}$ listed is direct $PM_{2.5}$.
(1) Total HAPs from these operations have been limited to not exceed 24.60 tons per twelve (12) consecutive month period.
(2) Total Manganese emissions from these operations have been limited to not exceed 9.90 tons per twelve (12) consecutive month period.
(3) Total Benzene emissions from these operations have been limited to not exceed 9.90 tons per twelve (12) consecutive month period.
(4) Limited to render 326 IAC 2-2 not applicable.

(a) This existing source is a major stationary source, under PSD (326 IAC 2-2), because each of the following PSD regulated pollutants, PM, PM10, PM2.5, VOC, and CO, 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(ff)(1).

(b) This existing source is not a major source of HAPs, as defined in 40 CFR 63.2, because HAPs emissions are limited to 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).

In order to render the source an area source, the Permittee shall comply with the following:

(1) The total emissions of any combinations of HAPs from the following operations:

Charge handling operation
Cupola
Induction furnace #1
Induction furnace #2
Hunter #1
Hunter #2
Hunter #5
Hunter #6
Sinto #1
Shakeout system for all mold lines
Shell core machines
Isocure #1
Isocure #2
Isocure #3
Shot #1
Shot #2
Shot #3
Grinding and Finishing

shall be limited such that the potential to emit (PTE) of combination of all Hazardous Air Pollutants (HAPs) shall not exceed 24.60 tons per twelve (12) consecutive month period, with compliance determined at the end of the month.

Compliance with these limits combined with the potential to emit HAPs from all other emission units at this source, shall limit the source-wide total potential to emit of any combination of HAPs to less than twenty five (25) tons per twelve (12) consecutive month period, and render this an area source of HAPs.

(2a) The total emission of Benzene from the following operations:

Hunter #1
Hunter #2
Hunter #5
Hunter #6
Sinto #1

shall be limited such that the potential to emit (PTE) of Benzene shall not exceed 9.90 tons per twelve (12) consecutive month period, with compliance determined at the end of the month.

(2b) The total emission of Manganese from the following operations:

Charge handling operation
Cupola
Induction furnace # 1
Induction furnace # 2
Hunter #1
Hunter #2
Hunter #5
Hunter #6
Sinto #1
Shakeout system for all mold lines
Shot #1
Shot #2
Shot #3
Grinding and finishing

shall be limited such that the potential to emit (PTE) of Manganese shall not exceed 9.90 tons per twelve (12) consecutive month period, with compliance determined at the end of the month.

Compliance with these limits shall limit the source-wide total potential to emit of any single HAP to less than ten (10) tons per twelve (12) consecutive month period, and and render this an area source of HAPs.

Federal Rule Applicability

Compliance Assurance Monitoring (CAM):

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

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

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

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

(b) Pursuant to 40 CFR 64.2(b)(1)(i), emission limitations or standards proposed after November 15, 1990 pursuant to a NSPS or NESHAP under Section 111 or 112 of the Clean Air Act are exempt

from the requirements of CAM. Therefore, an evaluation was not conducted for any emission limitations or standards proposed after November 15, 1990 pursuant to a NSPS or NESHAP under Section 111 or 112 of the Clean Air Act.

(c) Pursuant to 40 CFR 64.2(b)(1)(iii), Acid Rain requirements pursuant to Sections 404, 405, 406, 407(a), 407(b), or 410 of the Clean Air Act are exempt emission limitations or standards. Therefore, CAM was not evaluated for emission limitations or standards for SO_2 and NO_X under the Acid Rain Program.

(d) Pursuant to 40 CFR 64.3(d), if a continuous emission monitoring system (CEMS) is required pursuant to other federal or state authority, the owner or operator shall use the CEMS to satisfy the requirements of CAM according to the criteria contained in 40 CFR 64.3(d).

The following table is used to identify the applicability of CAM to each existing emission unit and each emission limitation or standard for a specified pollutant based on the criteria specified under 40 CFR 64.2:

Emission Unit/Pollutant	Control Device	Applicable Emission Limitation	Uncontrolled PTE (tons/year)	Controlled PTE (tons/year)	CAM Applicable (Y/N)	Large Unit (Y/N)
Cupola/ PM*	WS WESP	326 IAC 11-1-2	>100	<100	Y	N
Cupola/ PM	WS WESP	No	>100	<100	N [1,3]	-
Cupola/ PM_{10}	WS WESP	No	-	-	N [1]	-
Cupola/ $PM_{2.5}$	WS WESP	No	-	-	N [1]	-
Cupola/ VOC	WS Afterburner	No	-	-	N [1]	-
Cupola/ Single HAP	WS Afterburner	To avoid 40 CFR 63, Subpart EEEEE	< 10	-	N [2]	-
Cupola/ Total HAPs	WS Afterburner	To avoid 40 CFR 63, Subpart EEEEE	< 25	-	N [2]	-
Electric Induction Furnace #1/ PM*	BH	326 IAC 6-3-2	<100	-	N [2]	-
Electric Induction Furnace #1/ PM	BH	No	<100	-	N [1,3]	-
Electric Induction Furnace #1/ PM_{10}	BH	No	-	-	N [1]	-
Electric Induction Furnace #1/ $PM_{2.5}$	BH	No	-	-	N [1]	-
Electric Induction Furnace #2/ PM*	BH	326 IAC 6-3-2	<100	-	N [2]	-
Electric Induction Furnace #2/ PM	BH	No	<100	-	N [1,3]	-
Electric Induction Furnace #2/ PM_{10}	BH	No	-	-	N [1]	-
Electric Induction Furnace #2/ $PM_{2.5}$	BH	No	-	-	N [1]	-
Mold Sand Handling/ PM*	BH	326 IAC 6-3-2	>100	<100	Y	N
Mold Sand Handling/ PM	BH	No	>100	<100	N [1,3]	-
Mold Sand Handling/ PM_{10}	BH	No	-	-	N [1]	-
Mold Sand Handling/ $PM_{2.5}$	BH	No	-	-	N [1]	-
Shakeout for all Mold Lines/ PM*	BH	326 IAC 6-3-2	>100	<100	Y	N
Shakeout for all Mold Lines/ PM	BH	No	>100	<100	N [1,3]	-

Emission Unit/Pollutant	Control Device	Applicable Emission Limitation	Uncontrolled PTE (tons/year)	Controlled PTE (tons/year)	CAM Applicable (Y/N)	Large Unit (Y/N)
Shakeout for all Mold Lines/ PM_{10}	BH	No	-	-	N [1]	-
Shakeout for all Mold Lines/ $PM_{2.5}$	BH	No	-	-	N [1]	-
Isocure Sand Handling/ PM*	BH	326 IAC 6-3-2	<100	-	N [2]	-
Isocure Sand Handling/ PM	BH	To avoid 326 IAC 2-2	-	-	N [3]	-
Isocure Sand Handling/ PM_{10}	BH	No	-	-	N [1]	-
Isocure Sand Handling/ $PM_{2.5}$	BH	No	-	-	N [1]	-
Shot blast machine #1/ PM*	BH	326 IAC 6-3-2	<100	-	N [2]	-
Shot blast machine #1/ PM	BH	No	>100	<100	N [1,3]	-
Shot blast machine #1/ PM_{10}	BH	No	-	-	N [1]	-
Shot blast machine #1/ $PM_{2.5}$	BH	No	-	-	N [1]	-
Shot blast machine #2/ PM*	BH	326 IAC 6-3-2	<100	-	N [2]	-
Shot blast machine #2 / PM	BH	326 IAC 2-2	>100	-	N [3]	-
Shot blast machine #2 / PM_{10}	BH	326 IAC 2-2	<100	-	N [2]	-
Shot blast machine #2 / $PM_{2.5}$	BH	326 IAC 2-2	<100	-	N [2]	-
Shot blast machine #3/ PM*	BH	326 IAC 6-3-2	<100	-	N [2]	-
Shot blast machines #3/ PM	BH	No	>100	<100	N [1,3]	-
Shot blast machine #3 / PM_{10}	BH	No	-	-	N [1]	-
Shot blast machine #3 / $PM_{2.5}$	BH	No	-	-	N [1]	-
Grinding and Finishing/ PM*	BH	326 IAC 6-3-2	<100	-	N [2]	-
Grinding and Finishing / PM	BH	326 IAC 2-2	-	-	N [3]	N
Grinding and Finishing/ PM_{10}	BH	326 IAC 2-2	<100	-	N [2]	-
Grinding and Finishing/ $PM_{2.5}$	BH	No	-	-	N [1]	-

Uncontrolled PTE (tpy) and controlled PTE (tpy) are evaluated against the Major Source Threshold for each pollutant. Major Source Threshold for criteria pollutants (PM10, PM2.5, SO2, NOX, VOC and CO) is 100 tpy, for a single HAP ten (10) tpy, and for total HAPs twenty-five (25) tpy.
Under the Part 70 Permit program (40 CFR 70), PM is not a regulated pollutant.

PM* For limitations under 326 IAC 6-3-2, 326 IAC 6.5, and 326 IAC 6.8, IDEM OAQ uses PM as a surrogate for the regulated air pollutant PM10. Therefore, uncontrolled PTE and controlled PTE reflect the emissions of the regulated air pollutant PM10.

N [1] There is no applicable emission limit for the pollutant.

N [2] CAM does not apply for the pollutant because the uncontrolled PTE of the pollutant is less than the major source threshold.

N [3] Under 326 IAC 2-2, PM is not a surrogate for a regulated air pollutant. Therefore, CAM does not apply to these emission units for the 326 IAC 2-2 PM limitation.

Controls: BH = Baghouse, WS = Wet Scrubber, WESP = Wet Electrostatic Preciptator

Emission units without air pollution controls are not subject to CAM. Therefore, they are not listed.

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are still applicable to the PM emissions for the following units in this Title V Renewal. A CAM plan will be incorporated into this Part 70 permit renewal:

(1) Cupola for PM
(2) Mold Sand Handling for PM

(3) Casting Shakeout for PM

In this renewal IDEM has made the following revisions:

(1) Clarified that the requirements of 40 CFR Part 64, CAM, are applicable to Cupola, Mold Sand Handling and the Casting Shakeout for PM only. Previously, the emission units were subject to CAM for PM10 and PM2.5, in addition to PM. However, there are no applicable limits for PM10 and PM2.5 for these emission units

New Source Performance Standards (NSPS)

(e) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the permit for this source.

National Emission Standards for Hazardous Air Pollutants (NESHAPs)

(f) This source is subject to the National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Area Sources 40 CFR 63, Subpart ZZZZZ, since it is an iron foundry located at an area source of HAPs.

The source is subject to the following portions of 40 CFR 63 Subpart ZZZZZ:

(1) 40 CFR 63.10880(a),(b)(1),(f)
(2) 40 CFR 63.10881(a)(1)-(3), (d)(2)
(3) 40 CFR 63.10885(a)(1),(a)(2)(i)-(ii),(b)(4)
(4) 40 CFR 63.10886
(5) 40 CFR 63.10890(a),(b),(c)(1)-(3),(d),(e)(1)-(2)&(5)(7),(f),(g),(i)
(6) 40 CFR 63.10895(a),(b),(c)(1)-(2),(e)
(7) 40 CFR 63.10896(a)(1)-(5),(b)
(8) 40 CFR 63.10897(a)(1)(i)-(ii),(a)(4)(i)-(iii),(e)-(h)
(9) 40 CFR 63.10898(a)(1)-(3),(b)-(j),(l)(1)-(3)
(10) 40 CFR 63.10899(a),(b)(1),(b)(4)-(8),(b)(10)-(12),(b)(13)(i)-(iii),(c)(1)-(3),(d)
(11) 40 CFR 63.10900(a),(b)
(12) 40 CFR 63.10905
(13) 40 CFR 63.10906

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

The Permittee shall comply with the test methods and procedure requirements provided in 40 CFR 63.10898.

This is an existing applicable requirement and no change has been made in this permit renewal.

(g) This source is not subject to the National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries, 40 CFR Part 63, Subpart EEEEE, because this source is not a major source of hazardous air pollutant (HAP) emissions

(h) There are no other National Emission Standards for Hazardous Air Pollutants (NESHAP) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in this permit renewal.

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))
This source was already major under 326 IAC 2-2 (PSD) before August 7, 1977, because it is one of the 28 listed source categories (secondary metal production) and at least one regulated pollutant is emitted at a rate greater than 100 tons per year.

In this renewal, the PTE of the charge handling operation (constructed in 1970) and Cupola furnace (constructed in 1972) have been calculated using a nominal capacity of 14 tons per year. These changes will not result in the 326 IAC 2-2 (PSD) requirements since this source was already a PSD major source prior to August 7, 1977.

(a) Prior to 1977
The following units were constructed prior to 1977:
(1) charge handling operation,
(2) one (1) cupola furnace
(3) inoculation process,
(4) ladles
(5) mold sand handling system,
(6) mold making machine, identified as Hunter #2 (which was previously identified as Hunter #4),
(7) two (2) shot blast machines (Shot #1 and Shot #3),
(8) shell core making process, and
(9) core combustion units

(b) 1978 Modification
The isocure core machines, identified as Isocure #1 and Isocure #2, were constructed in 1978. The emissions from these units were less than the significant threshold. Therefore, the requirements of 326 IAC 2-2 (PSD) did not apply to this modification.

(c) 1979 Modification
The mold making line, Hunter #5, was constructed in 1979. The emissions from this unit were less than the significant threshold. Therefore, the requirements of 326 IAC 2-2 (PSD) did not apply to this modification.

(d) 1981 Modification
The mold making line, Hunter #6, was constructed in 1981. The emissions from this unit were less than the significant threshold. Therefore, the requirements of 326 IAC 2-2 (PSD) did not apply to this modification.

(e) 1987 Modification
Six (6) grinders, identified as Grinder #1 - #6, were constructed in 1987. See 2000 modification for PSD minor limits applicable to these units.

(f) 1988 Modification
The electric induction holding furnace was constructed in 1988. The emissions from this unit were less than the significant threshold. Therefore, the requirements of 326 IAC 2-2 (PSD) did not apply to this modification.

(g) 1995 Modification
The electric induction furnaces, #1 and #2, were constructed in 1995. The emissions from these units were less than the significant threshold. Therefore, the requirements of 326 IAC 2-2 (PSD) did not apply to this modification.

(h) 1998 Modification

The mold making line, Sinto #1, was constructed in 1988. The potential to emit PM, PM 10, and CO, is greater than 25, 15, and 100 tons per year, respectively.

In order to render the requirements 326 IAC 2-2 (PSD) not applicable, the Permittee shall comply with the following:

(1) The amount of iron throughput to Sinto #1 shall not exceed 30,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month

(2) The PM emissions from Sinto #1 shall not exceed 1.5 pounds of PM per ton of iron throughput.

(3) The PM10 emissions from Sinto #1 shall not exceed 0.99 pounds of PM10 per ton of iron throughput.

(4) The CO emissions from Sinto #1 shall not exceed 6.0 pounds of CO per ton of iron throughput.

Compliance with these limits shall limit the PM, PM10, and CO emissions from Sinto #1 to less than 25, 15, and 100 tons per twelve (12) consecutive month period, respectively, and render the requirements of 326 IAC 2-2 (PSD) not applicable to the 1998 modification.

In this renewal, IDEM has introduced PM and PM10 emissions limits that were previously overlooked.

Note: PM10 was a surrogate for PM2.5 in 1998

(i) 2000 Modification
The grinder, identified as Grinder #7 was constructed in 2000. The potential to emit PM and PM10 of the grinding and finishing process is greater than 25 and 15 tons per year, respectively.

In order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the Permittee shall comply with the following:

(a) The total PM emissions after control (DC-1) from the grinding and finishing process shall not exceed 5.68 pounds per hour.

(b) The total PM10 emissions after control (DC-1) from the grinding and finishing process shall not exceed 3.4 pounds per hour.

Compliance with the above limits shall limit the total potential to emit PM and PM10 to less than 25 and 15 tons per twelve (12) consecutive month period, respectively, and render the requirements of 326 IAC 2-2 (PSD) not applicable to the 1987 modification (Grinders #1 to #6), 2000 modification (Grinder #7), 2005 modification (Foxall #10), 2010 modification (Barinders #1-#2), and 2013 modification (Robotic grinding cell #1 and Robotic grinding cell #2).

In this renewal, IDEM revised the limit from "PM emissions from Grinders #1 through #9" to "PM emissions after control from the grinding and finishing process" and from ''PM10 emissions from Grinders #1 through #9" to " PM10 emissions after control from the grinding and finishing process" to clarify that the emission limits are for all the grinders, including Foxall 10, and Barinders and Robotic grinding cells #1 and #2, which were previously listed under insignificant activities.

Note: In 2017, the grinders, identified as Grinder #8 and Grinder #9 were removed from the facility.

(j) 2002 Modification
(1) Hunter #1

The mold making line, Hunter #1, was constructed in 2002. The potential to emit PM, PM 10, and CO, is greater than 25, 15, and 100 tons per year, respectively.

In order to render the requirements 326 IAC 2-2 (PSD) not applicable, the Permittee shall comply with the following:

(a) The amount of iron throughput to Hunter #1 mold line shall not exceed 30,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

(b) The PM emissions from Hunter #1 shall not exceed 1.5 pounds of PM per ton of iron throughput.

(c) The PM10 emissions from Hunter #1 shall not exceed 0.99 pounds of PM10 per ton of iron throughput.

(d) The CO emissions from Hunter #1 shall not exceed 6.0 pounds of CO per ton of iron throughput.

Compliance with these limits shall limit the PM, PM10, and CO emissions from Hunter #1 to less than 25, 15, and 100 tons per twelve (12) consecutive month period, respectively, and render the requirements of 326 IAC 2-2 (PSD) not applicable to the 2002 modification.

Note: PM10 was a surrogate for PM2.5 in 2002

These are existing limits and no changes have been made to them in this permit renewal.

(2) Isocure #3
The isocure core machine, identified as Isocure #3, was constructed in 2002. The VOC emissions from this unit were less than the significant threshold. Therefore, the requirements of 326 IAC 2-2 (PSD) did not apply to this modification.

(k) 2004 Modification
The electric induction furnaces, #1 and #2, constructed in 1995, were modified in 2004. The modification was to increase the capacity of each furnace from 1.75 tons per hour to 4 tons per hour. The increase in emissions was less than the significant threshold. Therefore, pursuant to MSM 099-19820-00001, issued on December 9, 2004, the requirements of 326 IAC 2-2 (PSD) did not apply to this modification.

(l) 2005 Modification
(1) Hunter #2
The mold making line, Hunter #2, constructed in 1975, was modified in 2005. Pursuant to Administrative Amendment No. T099- 20662-00001, issued on March 28, 2005, the modification allowed the source to connect existing Hunter #4 to a new molding system, and re-identify the unit as Hunter #2. Therefore, the requirements of 326 IAC 2-2 (PSD) did not apply to this modification.

(2) Grinder Auto Foxall #10
Pursuant to Administrative Amendment No. T099- 21164-00001, issued on August 8, 2005, the permit had been revised to add Foxall #10 with maximum process capacity 8.4 ton per hour.

The information indicated that due to the upstream constraints when Foxall #10 was added, the grinding and finishing operation was not affected by this change, indicating the

emissions from the grinding and finishing operation would not increase. Therefore, the requirements of 326 IAC 2-2 (PSD) did not apply to this modification.
See 2000 modification for applicable emissions limits.

(m) 2007 Modification

(1) Sand Mixer, Isocure core making process
The sand mixer for the isocure core making process was constructed in 2007 with the potential to emit PM greater than 25 tons per year.

Pursuant to 326 IAC 2-7-10.5(d)(4)(C) (Minor Source Modifications) (Repealed) and Permit No. 099-24837-00001, issued on July 16, 2007, and in order to render 326 IAC 2-2 not applicable, the Permittee shall limit the PM emissions after the Bin Vent #4 from the sand mixer of the isocure core making process to less than 25 tons per year by:

(a) Operating with a control efficiency of at least 99%; and

(b) No visible emissions.

These are existing requirements for the source.

(2) Inoculation process
The inoculation operation was modified in 2007 to include the tundish ladle method of magnesium treatment.

Pursuant to Administrative Amendment No. T099-25193-00001, issued on October 22, 2007, the addition of the tundish ladle inoculation method for magnesium treatment of molten metal as an alternative to the existing Flowtret inoculation method for magnesium treatment of molten metal did not increase the criteria pollutants emissions to the furnaces, therefore, the requirements of 326 IAC 2-2 (PSD) did not apply to this modification.

(n) 2012 Modification
The existing shot blast machine, identified as Shot #2, constructed in 1963, was replaced with a new shot blast machine. The new shot blast machine has the same nomenclature as the old shot blast machine. The potential to emit PM, PM10, and PM2.5 is greater than 25, 15, and 10 tons per year, respectively.

In order to render the requirements of 326 IAC 2-2 (PSD) not applicable to the 2012 modification:

(1) The PM emissions after control (DC-1) from the shot blast machine, Shot #2, shall not exceed 5.68 pounds per hour.

(2) The PM10 emissions after control (DC-1) from the shot blast machine, Shot #2, shall not exceed 3.40 pounds per hour.

(3) The PM2.5 emissions after control (DC-1) from the shot blast machine, Shot #2, shall not exceed 2.24 pounds per hour.

(4) The Pb emissions after control (DC-1) from the shot blast machine, Shot #2, shall not exceed 0.134 pounds per hour.

Compliance with these limits shall limit the PM, PM10, PM2.5, and Pb emissions from Shot #2 to less than 25, 15, 10, and 0.6 tons per twelve (12) consecutive month period, respectively, and render the requirements of 326 IAC 2-2 (PSD) not applicable to the 2012 modification.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The operation of this source will continue to limit to less than 10 tons per year of a single HAP and less than 25 tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 2-6 (Emission Reporting)
This source is subject to 326 IAC 2-6 (Emission Reporting) because it is required to have an operating permit pursuant to 326 IAC 2-7 (Part 70). The potential to emit of VOC and PM10 is greater than 250 tons per year, and the potential to emit of CO is greater than 2,500 tons per year. Therefore, pursuant to 326 IAC 2-6-3(a)(1), annual reporting is required. An emission statement shall be submitted in accordance with the compliance schedule in 326 IAC 2-6-3 and every year thereafter. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

326 IAC 2-7-6(5) (Annual Compliance Certification)
The U.S. EPA Federal Register 79 FR 54978 notice does not exempt Title V Permittees from the requirements of 40 CFR 70.6(c)(5)(iv) or 326 IAC 2-7-6(5)(D), but the submittal of the Title V annual compliance certification to IDEM satisfies the requirement to submit the Title V annual compliance certifications to EPA. IDEM does not intend to revise any permits since the requirements of 40 CFR 70.6(c)(5)(iv) or 326 IAC 2-7-6(5)(D) still apply, but Permittees can note on their Title V annual compliance certification that submission to IDEM has satisfied reporting to EPA per Federal Register 79 FR 54978. This only applies to Title V Permittees and Title V compliance certifications.

326 IAC 5-1 (Opacity Limitations)
This source is subject to the opacity limitations specified in 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.

326 IAC 6.5 PM Limitations Except Lake County
This source is not subject to 326 IAC 6.5, because it is not located in one of the following counties: Clark, Dearborn, Dubois, Howard, Marion, St. Joseph, Vanderburgh, Vigo or Wayne.

326 IAC 6.8 PM Limitations for Lake County
This source is not subject to 326 IAC 6.8, because it is not located in Lake County.

326 IAC 7-1.1 Sulfur Dioxide Emission Limitations
This source is not subject to 326 IAC 326 IAC 7-1.1, because the source does not have emission units listed in the 326 IAC 7-1.1 with potential to emit SO_2 (or limited potential to emit SO_2) equal to or greater than 25 tons per year or 10 pounds per hour.

326 IAC 11-1 (Emission Limitations for Existing Foundries)
This rule establishes specific emission limitations for particulate matter from foundries in operation on or before December 6, 1968. This foundry was constructed prior to 1968, therefore, this rule is applicable to the cupola at this source.

Pursuant to 326 IAC 11-1-2, the allowable particulate emission rate from the cupola shall not exceed 28.8 pounds per hour when operating at a process weight rate of 28,000 pounds per hour.

Based on Appendix A, a control device is required to comply with this limit.

State Rule Applicability – Individual Facilities

326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating)

(1) Pursuant to 326 IAC 6-2-3(d), the PM emissions from the core oven at the source, shall not exceed 0.8 pounds per MMBtu heat input, because this is an indirect heating facility that was constructed prior to June 08, 1972.

(2) Pursuant to 326 IAC 6-2-4, the PM emissions from the following indirect heating facilities that were constructed after September 21, 1983, shall not exceed pounds per MMBtu heat input as specified:

Emission Unit	Limit (lb PM/ MMBtu)
Gas heaters	
Gas #01	0.6
Gas #02	0.6
Gas #03	0.6
Gas #04	0.6
Gas #05	0.6
Gas #06	0.6
Gas #07	0.6
Gas #08	0.6
Gas #09	0.6
Gas #10	0.6
Gas #11	0.6
Gas #12	0.6
Gas #13	0.6
Infra Heaters	
Infra #01IR *	0.59
Infra #02IR *	0.59
Infra #05IR	0.6
Infra #06IR	0.6
Infra #07IR	0.6
Infra #08IR	0.6
Infra #09IR	0.6
Infra #10IR	0.6
Infra #11IR	0.6
Infra #12IR	0.6
Infra #13IR	0.6
Infra #14IR	0.6
Infra #15IR	0.6
Infra #16IR	0.6
Tube Heaters	
Tube #01TIR	0.6
Tube #02TIR	0.6

Emission Unit	Limit (lb PM/ MMBtu)
Tube #03TIR	0.6
Tube #04TIR	0.6
Tube #05TIR	0.6
Tube #06TIR	0.6
Pan heater #1	0.6
Pan heater #2 *	0.59
Hot blast heater (for cupola combustion air)	0.6

*The lb PM per MMBtu limit for these emission units was established using the following equation:

$$Pt = \frac{1.09}{Q^{0.26}}$$

Where:
Pt = Pounds of particulate matter emitted per million British thermal units (lb/MMBtu).

Q = Total source maximum operating capacity rating in MMBtu/hr heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation.

326 IAC 6-3-2 (Particulate Emisison Limitations for Manufacturing Processs)

(1) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the facilities listed below shall not exceed as specified when operating at the respective process weight rate:

Process Description	Process Weight Rate (tons/hr)	Allowable Emissions (lbs/hr)	Equation used
Charge handling operation	15.4	25.61	(a)
Inoculation (Mg treatment)	8.00	16.51	(a)
Induction furnace #1	4.00	10.38	(a)
Induction furnace #2	4.00	10.38	(a)
Hunter #1	45.20	43.64	(b)
Hunter #2	45.20	43.64	(b)
Hunter #5	21.90	32.43	(a)
Hunter #6	21.90	32.43	(a)
Sinto #1	54.00	45.30	(b)
Shakeout system for all mold lines	20.00	30.51	(a)
Mold sand handling for all mold lines	100.00	51.28	(b)
Shell core sand handling	0.70	3.23	(a)
Isocure core sand handling (silo and sand mixer)	3.00	8.56	(a)
Shot #1	4.20	10.72	(a)
Shot #2	4.20	10.72	(a)
Shot #3	4.20	10.72	(a)
Grinding and finishing	8.40	17.06	(a)

The pound per hour limitation was calculated with the following equations:

(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

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

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

Based on TSD App A, a control device is required for the following emission units/ processes in order to comply with this limit:

Shakeout system for all mold lines
Mold sand handling for all mold lines
Isocure core sand handling (silo and sand mixer)
Shot #1
Shot #2
Shot #3
Grinding and finishing

(2) Pursuant to 326 IAC 6-3-1(b)(14), sand handling for 3-D Printer (Printer #1) is exempt from the requirements of 326 IAC 6-3-2, because the potential particulate matter (PM) emissions from the process is less than five hundred fifty-one thousandths (0.551) pound per hour.

326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Sources

(1) The following listed units are not subject to the requirements of 326 IAC 8-1-6 because they were constructed prior to 1980.

Cupola furnace
Mold sand handling system for all mold lines
Hunter #2
Hunter #5
Isocure #1
Isocure #2
Shakeout system for all mold lines
Shell core making process

(2) The following listed units are not subject to the requirements of 326 IAC 8-1-6 because they each have potential to emit VOC less than 25 tons per year.

Hunter #1
Hunter #6
Sinto #1
Isocure #3
3-D Printer

Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-7 are required to assure 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.

(a) The Compliance Determination Requirements applicable to this source are as follows:

(1) Source-wide Total HAP Emissions (tons/yr) = $\sum T_i$ = $T_{CH} + T_{CUP} + T_{EIF} + T_{PCC} + T_{SHO} + T_{SC} + T_{IC} + T_{SB} + T_{GF}$

$T_i = EF_i * M_i * 1$ ton/2000 lbs

Where:
T_i = Total HAP emissions from i operation (tons per twelve (12) consecutive month period)
EF_i = Pound total HAP per ton of metal throughput or sand throughput (as applicable) to i operation
M_i = Total metal or sand throughput to i operation (tons per twelve (12) consecutive month period)

i	Operation	Emission Factor, EF_i (lb total HAP/ ton of throughput)
CH	Charge handling	0.023
CUP	Cupola	0.135
EIF	Electric induction furnaces (# 1 and #2)	0.002
PCC	Mold making line (Hunter #1, Hunter #2, Hunter #5, Hunter #6 and Sinto #1)	0.35
*SHO	Shakeout system for all mold lines	0.12
SC	Shell core machines	0.242
IC	Isocure core machines	0.04
SB	Shot blasting	0.587
GF	Grinding and finishing	0.587

* The organic HAP emissions from the shakeout system have been included with the HAP emissions from the mold making lines (Hunter #1, Hunter #2, Hunter #5, Hunter #6 and Sinto #1)

(2) Source-wide Single HAP Emissions (tons/yr)

(a) Benzene

$T_B = EF_B * M_{PCC} * 1$ ton/2000 lbs

Where:
T_B = Total benzene emissions from the mold making lines (Hunter #1, Hunter #2, Hunter #5, Hunter #6 and Sinto #1) and shakeout system (tons per twelve (12) consecutive month period)

EF_B = 0.165 pound total benzene per ton of metal throughput to the mold making lines (Hunter #1, Hunter #2, Hunter #5, Hunter #6 and Sinto #1) and shakeout system

M_{PCC} = Total metal throughput to the mold making lines (Hunter #1, Hunter #2, Hunter #5, Hunter #6 and Sinto #1) shakeout system (tons per twelve (12) consecutive month period) and

(b) Manganese

$$T_M = \sum T_j = T_{MCH} + T_{MCUP} + T_{MEIF} + T_{MPCC} + T_{MSHO} + T_{MSB} + T_{MGF}$$

$$T_j = EF_j * M_j * 1 \text{ ton}/2000 \text{ lbs}$$

Where:
T_M = Total manganese emissions from the source (tons per twelve (12) consecutive month period)
T_j = Total manganese emissions from j operation (tons per twelve (12) consecutive month period)
EF_j = Pound manganese per ton of metal throughput to j operation
M_j = Total metal throughput to j operation (tons per twelve (12) consecutive month period)

j	Operation	Emission Factor, EF_j (lb Mn/ ton of throughput)
MCH	Charge handling	0.0186
MCUP	Cupola	0.113
MEIF	Electric induction furnaces (# 1 and #2)	0.00088
MPCC	Mold making lines (Hunter #1, Hunter #2, Hunter #5, Hunter #6 and Sinto #1)	0.047
MSHO	Shakeout system for all mold lines	0.099
MSB	Shot blasting	0.48
MGF	Grinding and finishing	0.48

(b) The compliance monitoring requirements applicable to this source are as follows:

Control	Parameter	Frequency
Wet scrubber for Cupola (1)	Water Pressure Drop	Daily
	Water Flow	
Afterburner for Cupola (1)	Temperature*	Continuous
Baghouse DC2 for Induction Furnace #1 and #2 (2)	Water Pressure Drop	Daily
Baghouse DC2 for Mold sand handling and Shakeout system (3)	Water Pressure Drop	Daily
Bin vent filter #3 for Isocure core and silo (4)	Visible Emissions	Daily
Baghouse DC-1 for Shot #1, Shot #2, and Shot #3, and Grinding and finishing (5)	Visible Emissions	Daily
* The existing permit specified 3-hour rolling average but has been updated to 3 hour average in this renewal.		

These monitoring conditions are necessary because:

(1) The scrubber and afterburner for the Cupola must operate properly to ensure compliance with 326 IAC 11-1-12 and 40 CFR 64 (CAM).

(2) The potential to emit PM from the electric induction furnaces is based on a nominal throughput. Therefore, the baghouse for the electric induction furnaces must operate properly even though a control device is not required to ensure compliance with 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes).

(3) The baghouse for the Mold sand handling and Shakeout system must operate properly to ensure compliance with 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes) and 40 CFR 64 (CAM).

(4) The baghouse for the Bin Vent Filter BV-3 for Isocure Core Sand Silo must operate properly to ensure compliance with 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

(5) The baghouse for the shot blast machines, and grinding and finishing process must operate properly to ensure compliance with 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes) and 326 IAC 2-2 (PSD).

In this renewal, IDEM has made the following changes:

(1) Removed visible emissions observations for bin vent #4 controlling emissions from the isocure sand mixer because it exhausts inside the building.

(2) Removed visible emissions observations for Hunter #1, Hunter #2, Hunter #5, Hunter #6, and Sinto #1, because these emission units are uncontrolled.

(3) Removed visible emissions observations for the below listed emission units because these emission units have parametric monitoring as well.

Emission Unit	Control Device
Induction furnace #1	Baghouse DC2
Induction furnace #2	
Shakeout system for all mold lines	
Mold sand handling for all mold lines	
Shot #1	Baghouse DC1
Shot #2	
Shot #3	
Grinding and finishing	

(c) The testing requirements applicable to this to this source are as follows:

Emission Unit	Control Device	Pollutant	Timeframe for Testing	Frequency of Testing
Hunter #1 (1)	--	PM and PM10*	Five (5) years from the most recent valid testing	Every five (5) years
Shot #2 (2)	DC#1	PM PM10* PM2.5* and Pb	180 days after issuance of this permit	Every five (5) years
Grinding and finishing (2)	DC#1	PM PM10*	180 days after issuance of this permit	Every five (5) years
Cupola (3)	Wet scrubber and wet electrostatic precipitator	PM	Five (5) years from the most recent valid testing	Every five (5) years

*PM10 and PM2.5 include filterable and condensable PM

(1) These are existing testing requirements for the source. The most recent valid compliance demonstration was performed on November 29, 2016.

(2) This is a new testing requirement for the source. This is required to ensure that Shot #2, and grinding and finishing operations are in compliance with the 326 IAC 2-2 (PSD) avoidance limits. This was discussed and confirmed by Steve Friend of Compliance and Enforcement Branch.

(3) This is a new testing requirement for the source based on the potential emissions from the cupola. This was discussed and confirmed by Steve Friend of Compliance and Enforcement Branch. The most recent valid compliance demonstration was performed on June 5, 2018.

(4) Testing is not required for the following units:

(i) Sinto #1: the emission factor of 6.0 pounds of CO per ton of iron is an acceptable emission factor by IDEM.

(ii) Single and Total HAPs for the source: the compliance determination and compliance monitoring are sufficient to comply with these limits.

Conclusion and Recommendation

The staff recommends to the Commissioner that the Part 70 Significant Source Modification and Part 70 Operating Permit Renewal be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant. An application for the purposes of this review was received on July 26, 2016 and April 27, 2018. Additional information was received from July 18, 2018 to September 05, 2018.

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Source Modification No. 099-39928-00001.

The operation of this proposed modification and entire source shall be subject to the conditions of the attached Part 70 Operating Permit Renewal.

IDEM Contact

(a) Questions regarding this proposed permit can be directed to Rithika Reddy 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) 234-9694 or toll free at 1-800-451-6027 and ask for Rithika Reddy.

(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 Air Permits page on the Internet at: http://www.in.gov/idem/airquality/2356.htm; and the Citizens' Guide to IDEM on the Internet at: http://www.in.gov/idem/6900.htm.

Appendix A: Emission Calculations
Secondary Metal Production

Company Name: Bremen Castings, Inc.
Address: 500 North Baltimore Street, Bremen, Indiana 46506
Part 70 Operating Permit: T099-37432-00001
Significant Source Modification: 099-39928-00001
Reviewer: Rithika Reddy

Unlimited Potential to Emit (tons/year)

Emission Unit	PM	PM_{10}	$PM_{2.5}$	SO_2	Nox	VOC	CO	Total HAPs	Worst Single HAP	
Shot #2	285.14	29.43	29.43	-	-	-	-	-	-	-
Total Emissions	**285**	**29**	**29**	-	-	-	-	-	-	-

Appendix A: Emission Calculations
ATPA Evaluation

Company Name: **Bremen Castings, Inc.**
Address: **500 North Baltimore Street, Bremen, Indiana 46506**
Part 70 Operating Permit: **T099-37432-00001**
Significant Source Modification: **099-39928-00001**
Reviewer: **Rithika Reddy**

Actual PM Emissions After Control

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	**Baseline Avg. of highest 2/yrs**	
Emission Unit	ton/yr	ton/yr	ton/yr	ton/yr	ton/yr	ton/yr	ton/yr	ton/yr	ton/yr	ton/yr	**ton/yr**	
Shotblast #2	5.65	4.07	5.21	6.56	5.45	4.55	4.39	3.88	4.12	4.39	**6.01**	*January 1, 2011-December 31, 2012*

Actual PM10/PM2.5 Emissions After Control

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	**Baseline Avg. of highest 2/yrs**	
Emission Unit	ton/yr	ton/yr	ton/yr	ton/yr	ton/yr	ton/yr	ton/yr	ton/yr	ton/yr	ton/yr	**ton/yr**	
Shotblast #2	0.57	0.41	0.52	0.66	0.55	0.46	0.44	0.39	0.41	0.44	**0.61**	January 1, 2011-December 31, 2012

Projected Actual PM Emissions After Control

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
Emission Unit	ton/yr	ton/yr	ton/yr	ton/yr	ton/yr	ton/yr	ton/yr	ton/yr	ton/yr	ton/yr	ton/yr	
Shotblast #2	4.55	4.39	3.88	4.12	4.39	4.67	4.94	5.21	5.49	5.76	6.03	2023 highest 12 month period

Projected Actual PM10/PM2.5 Emissions After Control

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
Emission Unit	ton/yr	ton/yr	ton/yr	ton/yr	ton/yr	ton/yr	ton/yr	ton/yr	ton/yr	ton/yr	ton/yr	
Shotblast #2	0.46	0.44	0.39	0.41	0.44	0.47	0.50	0.53	0.56	0.59	0.62	2023 highest 12 month period

ATPA = Projected Actual - Baseline			
Shotblast #2	PM	PM10	PM2.5
Projected Actual	6.03	0.62	0.62
Baseline Actual Emissions	6.01	0.61	0.61
ATPA	**0.03**	**0.02**	**0.02**

The above emissions data was provided by the source.

Appendix A: Emission Calculations
Secondary Metal Production

Company Name: **Bremen Castings, Inc.**
Address: **500 North Baltimore Street, Bremen, Indiana 46506**
Part 70 Operating Permit: **T099-37432-00001**
Significant Source Modification: **099-39928-00001**
Reviewer: **Rithika Reddy**

Unlimited Potential to Emit (tons/year)

Emission Unit	PM	PM_{10}	$PM_{2.5}$	SO_2	Nox	VOC	CO	Total HAPs	Worst Single HAP	
Charge Handling Operation	40.47	24.28	24.28	-	-	-	-	1.53	1.25	Mn
Cupola	846.22	760.37	760.37	55.19	6.13	11.04	8,891.40	8.28	6.93	Mn
Inoculation (Mg treatment)	63.07	63.07	63.07	-	-	-	-	-	-	-
Induction Furnace #1	15.77	15.07	15.07	-	-	-	-	0.03	0.02	Mn
Induction Furnace #2	15.77	15.07	15.07	-	-	-	-	0.03	0.02	Mn
Hunter #1	26.28	26.28	26.28	0.35	0.18	2.45	105.12	41.56	14.45	Benzene
Hunter #2	26.28	26.28	26.28	0.35	0.18	2.45	105.12			
Hunter #5	19.71	19.71	19.71	0.26	0.13	1.84	78.84			
Hunter #6	19.71	19.71	19.71	0.26	0.13	1.84	78.84			
Sinto #1	39.42	39.42	39.42	0.53	0.26	3.68	157.68			
Shakeout for all Mold Lines	280.32	196.22	196.22	-	-	105.12	-			
Mold Sand Handling	1,576.80	236.52	236.52	-	-	-	-	-	-	-
Shell Core Machines	-	-	-	0.98	1.53	6.13	-	0.74	0.74	Phenol
Shell Core Sand Handling	11.04	1.66	1.66	-	-	-	-	-	-	-
Isocure Core Machines	-	-	-	-	-	38.40	-	0.52	0.29	Naphthalene
Isocure Core Sand Handling	47.30	7.10	7.10	-	-	-	-	-	-	-
Shot #1	285.14	29.43	29.43	-	-	-	-	32.40	26.52	Mn
Shot #2	285.14	29.43	29.43	-	-	-	-			
Shot #3	285.14	29.43	29.43	-	-	-	-			
Grinding/Finishing	570.28	58.87	58.87	-	-	-	-	21.60	17.68	Mn
3-D Printer (Core Making)	-	-	-	-	-	0.49	-	-	-	-
Sand Handling for 3-D Printer	1.49	0.22	0.22	-	-	-	-	-	-	-
Natural Gas Combustion	0.38	1.51	1.51	0.12	19.92	1.10	16.73	0.38	0.36	Hexane
Total Emissions	**4,456**	**1,600**	**1,600**	**58**	**28**	**175**	**9,434**	**107**	**65**	**Mn**

Note:

There are manganese emissions from Hunter #1, Hunter#2, Hunter#5, Hunter#6 and Sinto#1 as well.

Appendix A: Emission Calculations
Secondary Metal Production

Company Name: Bremen Castings, Inc.
Address: 500 North Baltimore Street, Bremen, Indiana 46506
Part 70 Operating Permit: T099-37432-00001
Significant Source Modification: 099-39928-00001
Reviewer: Rithika Reddy

Limited Potentail to Emit (tons/year)

Emission Unit	PM	PM_{10}	$PM_{2.5}$	SO_2	Nox	VOC	CO	Total HAPs	Worst Single HAP	
Charge Handling Operation	40.47	24.28	24.28	-	-	-	-	*	**	Mn
Cupola	846.22	760.37	760.37	55.19	6.13	11.04	8,891.40			
Inoculation (Mg treatment)	63.07	63.07	63.07	-	-	-	-	-	-	-
Induction Furnace #1	15.77	15.07	15.07	-	-	-	-	*	**	Mn
Induction Furnace #2	15.77	15.07	15.07	-	-	-	-			
Hunter #1	22.50	14.85	14.85	0.35	0.18	2.45	90.00	*	***	Benzene
Hunter #2	26.28	26.28	26.28	0.35	0.18	2.45	105.12			
Hunter #5	19.71	19.71	19.71	0.26	0.13	1.84	78.84			
Hunter #6	19.71	19.71	19.71	0.26	0.13	1.84	78.84			
Sinto #1	22.50	14.85	14.85	0.53	0.26	3.68	90.00			
Shakeout for all Mold Lines	280.32	196.22	196.22	-	-	105.12	-			
Mold Sand Handling	1,576.80	236.52	236.52	-	-	-	-	-	-	-
Shell Core Machines	-	-	-	0.98	1.53	6.13	-	*	0.74	Phenol
Shell Core Sand Handling	11.04	1.66	1.66	-	-	-	-	-	-	-
Isocure Core Machines	-	-	-	-	-	38.40	-	*	0.29	Naphthalene
Isocure Core Sand Handling	47.30	7.10	7.10	-	-	-	-	-	-	-
Shot #1	285.14	29.43	29.43	-	-	-	-	*	**	Mn
Shot #2	24.88	14.89	9.81	-	-	-	-			
Shot #3	285.14	29.43	29.43	-	-	-	-			
Grinding and Finishing	24.88	14.89	14.89	-	-	-	-			
3-D Printer (Core Making)	-	-	-	-	-	0.49	-	-	-	-
Sand Handling for 3-D Printer	1.49	0.22	0.22	-	-	-	-	-	-	-
Natural Gas Combustion	0.38	1.51	1.51	0.12	19.92	1.10	16.73	0.38	0.36	Hexane
Total Emissions	**3,629**	**1,505**	**1,500**	**58**	**28**	**175**	**9,351**	**<24.98**	**<9.90**	****, *****

Note:

There are manganese emissions from pouring/cooling operations as well.

* Total HAPs from these operations shall not exceed 24.60 tons per twelve (12) consecutive month period.

** Total Manganese emissions from these operations shall not exceed 9.90 tons per twelve (12) consecutive month period.

***Total Benzene emissions from these operations shall not exceed 9.90 tons per twelve (12) consecutive month period.

Appendix A: Emission Calculations
Gray Iron Foundry

Company Name: **Bremen Castings, Inc.**
Address: **500 North Baltimore Street, Bremen, Indiana 46506**
Part 70 Operating Permit: **T099-37432-00001**
Significant Source Modification: **099-39928-00001**
Reviewer: **Rithika Reddy**

Emission Factors (lbs/ton)

Description	SCC	PM	PM_{10}	$PM_{2.5}$	SO_2	NOx	VOC	CO
Cupola	30400301	13.80	12.40	12.40	0.90	0.10	0.18	145
Melting Dept. - Charge Handling	30400315	0.60	0.36	0.36	0	0	0	0
Melting Dept. - Induction Furnaces	30400303	0.90	0.86	0.86	0	0	0	0
Melting Dept. - Inoculation (Mg treatment)	30400321	1.80	1.80	1.80	0	0	0	0

Uncontrolled Potential Emissions (tons/yr)

Process	Maximum Throughput (ton/hr)	PM	PM_{10}	$PM_{2.5}$	SOx	NOx	VOC	CO
Cupola	14.0	846.2	760.4	760.4	55.2	6.1	11.0	8891.4
Melting Dept. - Charge Handling	15.4	40.5	24.3	24.3	0	0	0	0
Induction Furnace #1	4.0	15.8	15.1	15.1	0.0	0.0	0.0	0.0
Induction Furnace #2	4.0	15.8	15.1	15.1	0	0	0	0
Melting Dept. - Inoculation (Mg treatment)	8.0	63.1	63.1	63.1	0	0	0	0
Total Uncontrolled Emissions (tons/yr)		**981.3**	**877.9**	**877.9**	**55.2**	**6.1**	**11.0**	**8891.4**

Particulate Matter Control Efficiencies

Description	Control Device	Efficiency
Cupola	WS/WESP	98.0%
	Afterburner	95.0%
Isocure Core Sand Handling	Bin Vents	99.0%
Shotblasting, Grinding/Finishing	DC-1	97.0%
Induction Furnaces, Shakeout, Mold Sand Handling	DC-2	97%

Controlled Potential Emissions (tons/yr)

Process	Maximum Throughput (ton/hr)	PM	PM_{10}	$PM_{2.5}$	SOx	NOx	VOC	CO
Cupola	14.0	16.9	15.2	15.2	1.1	0.1	0.6	444.6
Melting Dept. - Charge Handling	15.4	40.5	24.3	24.3	0	0	0	0
Induction Furnace #1	4.0	0.47	0.45	0.45	0.00	0.00	0.00	0.00
Induction Furnace #2	4.0	0.47	0.45	0.45	0.00	0.00	0.00	0.00
Melting Dept. - Inoculation (Mg treatment)	8.0	1.9	1.9	1.9	0	0	0	0
Total Uncontrolled Emissions (tons/yr)		**60.2**	**42.3**	**42.3**	**1.1**	**0.1**	**0.6**	**444.6**

Note:
AP-42/Fire emission factors were used for calculations.

Methodology:
Uncontrolled Potential Emissions (tons/year) = Emission Factor (lb/ton) * Material throughput (ton/hr)*8760 hr/yr * 1/2000 ton/lb
Controlled Potential Emissions (tons/year) = Uncontrolled Potential Emissions (tons/year) * (1- Control Efficiency)

Appendix A: Emission Calculations
Gray Iron Foundry

Company Name: Bremen Castings, Inc.
Address: 500 North Baltimore Street, Bremen, Indiana 46506
Part 70 Operating Permit: T099-37432-00001
Significant Source Modification: 099-39928-00001
Reviewer: Rithika Reddy

Emission Factors (lbs/ton)

Description	SCC	PM	PM_{10}	$PM_{2.5}$	SO_2	NOx	VOC	CO
Pouring/Casting Cooling	30400320	1.50	1.50	1.50	0.02	0.01	0.14	6.00
Shakeout for all Mold Lines	30400331	3.20	2.24	2.24	0.00	0.00	1.20	*
Sand Handling	30400350	3.60	0.54	0.54	0.00	0.00	0.00	0.00
***Shotblast	30400340	15.50	1.60	1.60	0.00	0.00	0.00	0.00
***Grinding/Finishing	30400340	15.50	1.60	1.60	0.00	0.00	0.00	0.00
Isocure Core Machines	30400371	0.00	0.00	0.00	0.00	0.50	**	0.00
Shell Core Machines	30400370	0.00	0.00	0.00	0.32	0.50	**	0.00

** VOC emissions from core machines calculated separately.
* CO emission factor for pouring/cooling includes emissions from shakeout.
***Emission factors were taken from AP 42 Chapter 12.10, Table III-2

Uncontrolled Potential Emissions (tons/yr)

Process	Maximum Throughput (ton/hr)	PM	PM_{10}	$PM_{2.5}$	SOx	NOx	VOC	CO
Pouring/Casting Cooling (Hunter #1)	4.0	26.3	26.3	26.3	0.4	0.2	2.5	105.1
Pouring/Casting Cooling (Hunter #2)	4.0	26.3	26.3	26.3	0.4	0.2	2.5	105.1
Pouring/Casting Cooling (Hunter #5)	3.0	19.7	19.7	19.7	0.3	0.1	1.8	78.8
Pouring/Casting Cooling (Hunter #6)	3.0	19.7	19.7	19.7	0.3	0.1	1.8	78.8
Pouring/Casting Cooling (Sinto #1)	6.0	39.4	39.4	39.4	0.5	0.3	3.7	157.7
Shakeout for all Mold Lines	20.0	280.3	196.2	196.2	0	0	105.1	*
Mold Sand Handling	100.0	1576.8	236.5	236.5	0	0	0	0
Shot #1	4.2	285.1	29.4	29.4	0	0	0	0
Shot #2	4.2	285.1	29.4	29.4	0.0	0.0	0.0	0.0
Shot #3	4.2	285.1	29.4	29.4	0.0	0.0	0.0	0.0
Grinding/Finishing	8.4	570.3	58.9	58.9	0	0	0	0
Isocure Core Machines	3.0	0	0	0	0	0	38.4	0
Isocure Core Machines Sand Handling	3.0	47.3	7.1	7.1	0.0	0.0	0.0	0.0
Shell Core Machines	0.7	0	0	0	1.0	1.5	6.1	0
Shell Core Machines Sand Handling	0.7	11.0	1.7	1.7	0.0	0.0	0.0	0.0
Total Uncontrolled Emissions (tons/yr)		**3472.6**	**720.1**	**720.1**	**2.7**	**2.4**	**161.9**	**525.6**

Controlled Potential Emissions (tons/yr)

Process	Controlled Efficiency (%)	PM	PM_{10}	$PM_{2.5}$	SOx	NOx	VOC	CO
Shakeout for all Mold Lines	95%	14.0	14.0	14.0	0	0	105.1	*
Mold Sand Handling	95%	78.8	11.8	11.8	0	0	105	*
Shot #1	99%	2.9	0.3	0.3	0.0	0.0	0.0	0.0
Shot #2	99%	2.9	0.3	0.3	0.0	0.0	0.0	0.0
Shot #3	99%	2.9	0.3	0.3	0.0	0.0	0.0	0.0
Grinding/Finishing	99%	5.7	0.6	0.6	0	0	0	0
Isocure Core Machines	-	0	0	0	0	0	38.4	0
Isocure Core Machines Sand Handling	99%	0.47	0.1	0.1	0	0	0.0	0
Shell Core Machines	-	0	0	0	1.0	1.5	6.1	0
Shell Core Machines Sand Handling	99%	0.1	0.0	0.0	0	0	0	0
Total Controlled Emissions (tons/yr)		**107.7**	**27.4**	**27.4**	**1.0**	**1.5**	**254.8**	**0.0**

Methodology:
Uncontrolled Potential Emissions (tons/year) = Emission Factor (lb/ton) * Material throughput (ton/hr)*8760 hr/yr * 1/2000 ton/lb
Controlled Potential Emissions (tons/year) = Uncontrolled Potential Emissions (tons/year) * (1- Control Efficiency)

Appendix A: Emission Calculations
HAP Emissions from Foundry Operations

Company Name: Bremen Castings, Inc.
Address: 500 North Baltimore Street, Bremen, Indiana 46506
Part 70 Operating Permit: T099-37432-00001
Significant Source Modification: 099-39928-00001
Reviewer: Rithika Reddy

Process Emissions

Process	Max Rate (tons iron/hr)	Limited Rate (tons iron/hr)	PM emission factor lb/ton	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Eac (ton/yr)	Control Device	Control Efficiency (%)
Charge Handling	15.4	14.00	0.60	chromium	0.00023	0.015	0.014	N/A	
SCC# 3-04-003-15				nickel	0.00040	0.027	0.025		
AP-42 Ch. 12.10				arsenic	0.00008	0.005	0.005		
				Lead	0.00231	0.156	0.142		
				Manganese	0.01860	1.255	1.141		
				Antimony	0.00111	0.075	0.068		
				TOTAL	**0.02273**	**1.53**	**1.39**		
Melting - Cupola	14	14.00	13.80	Lead	0.00676	0.415	0.004	WESP & Wet	99.0%
SCC# 3-04-003-01				Manganese	0.11300	6.929	0.069	scrubber	
AP-42 Ch. 12.10				Total Metal HAPs	0.12000	7.358	0.074		
				Total Organic HAPs	0.01500	0.920	0.000	Afterburner	100%
				TOTAL	**0.13500**	**8.28**	**0.07**		
Melting - Electric	8	8.00	0.90	chromium	0.00004	0.001	0.000	Baghouse	97.0%
Induction Furnaces				nickel	0.00004	0.002	0.000	DC-2	
SCC# 3-04-003-03				arsenic	0.00002	0.001	0.000		
AP-42 Ch. 12.10				Lead	0.00091	0.032	0.001		
				Manganese	0.00088	0.031	0.001		
HAPs emissions from				Antimony	0.00006	0.002	0.000		
2008 stack test				**TOTAL**	**0.00195**	**0.07**	**0.00**		
Pouring/Casting/Cooling	4.0	6.00	1.50	chromium	0.00057	0.010	0.015	N/A	
Hunter #1			1.0	nickel	0.00101	0.018	0.026		
SCC#3-04-003-20				arsenic	0.00020	0.003	0.005		
				Lead	0.00578	0.101	0.152		
				Manganese	0.04650	0.815	1.222		
				Antimony	0.00278	0.049	0.073		
				TOTAL	**0.05682**	**1.00**	**1.49**		
Pouring/Casting Cooling	4.0	4.00	1.03	chromium	0.00039	0.007	0.007	N/A	
Hunter #2			stack test	nickel	0.00069	0.012	0.012		
SCC#3-04-003-20				arsenic	0.00013	0.002	0.002		
				Lead	0.00397	0.069	0.069		
				Manganese	0.03193	0.559	0.559		
				Antimony	0.00191	0.033	0.033		
				TOTAL	**0.03902**	**0.68**	**0.68**		

Appendix A: Emission Calculations
HAP Emissions from Foundry Operations

Company Name: Bremen Castings, Inc.
Address: 500 North Baltimore Street, Bremen, Indiana 46506
Part 70 Operating Permit: T099-37432-00001
Significant Source Modification: 099-39928-00001
Reviewer: Rithika Reddy

Process Emissions (cont'd.)

Process	Max Rate (tons iron/hr)	Limited Rate (tons iron/hr)	PM emission factor lb/ton	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Eac (ton/yr)	Control Device	Control Efficiency (%)
Pouring/Casting Cooling Hunter #5 SCC#3-04-003-20	3.0	3.00	1.50	chromium	0.00057	0.007	0.007	N/A	
				nickel	0.00101	0.013	0.013		
				arsenic	0.00020	0.003	0.003		
				Lead	0.00578	0.076	0.076		
				Manganese	0.04650	0.611	0.611		
				Antimony	0.00278	0.036	0.036		
				TOTAL	**0.05682**	**0.75**	**0.75**		
Pouring/Casting Cooling Hunter #6 SCC#3-04-003-20	3.0	3.00	1.50	chromium	0.00057	0.007	0.007	N/A	
				nickel	0.00101	0.013	0.013		
				arsenic	0.00020	0.003	0.003		
				Lead	0.00578	0.076	0.076		
				Manganese	0.04650	0.611	0.611		
				Antimony	0.00278	0.036	0.036		
				TOTAL	**0.05682**	**0.75**	**0.75**		
Pouring/Casting Cooling Sinto #1 SCC#3-04-003-20	6.0	6.00	1.50	chromium	0.00057	0.015	0.015	N/A	
				nickel	0.00101	0.026	0.026		
				arsenic	0.00020	0.005	0.005		
				Lead	0.00578	0.152	0.152		
				Manganese	0.04650	1.222	1.222		
				Antimony	0.00278	0.073	0.073		
				TOTAL	**0.05682**	**1.49**	**1.49**		
Shakeout All Mold Lines EPA SCC#3-04-003-31 AP-42 Ch. 12.10	20.0	20.00	3.20	chromium	0.00122	0.107	0.003	Baghouse	97.0%
				nickel	0.00214	0.188	0.006	DC-2	
				arsenic	0.00042	0.036	0.001		
				Lead	0.01232	1.079	0.032		
				Manganese	0.09920	8.690	0.261		
				Antimony	0.00592	0.519	0.016		
				TOTAL	**0.12122**	**10.62**	**0.32**		
Shotblast #1 - #3 SCC# 3-04-003-40 AP-42 Ch. 12.10	12.6	8.40	15.50	chromium	0.00589	0.325	0.007	Baghouse	97.0%
				nickel	0.01039	0.573	0.011	DC-1	
				arsenic	0.00202	0.111	0.002		
				Lead	0.05968	3.293	0.066		
				Manganese	0.48050	26.518	0.530		
				Antimony	0.02868	1.583	0.032		
				TOTAL	**0.58714**	**32.40**	**0.65**		
Grinding/Finishing SCC# 3-04-003-40 AP-42 Ch. 12.10	8.40	8.40	15.50	chromium	0.00589	0.217	0.007	Baghouse	97.0%
				nickel	0.01039	0.382	0.011	DC-1	
				arsenic	0.00202	0.074	0.002		
				Lead	0.05968	2.196	0.066		
				Manganese	0.48050	17.679	0.530		
				Antimony	0.02868	1.055	0.032		
				TOTAL	**0.58714**	**21.60**	**0.65**		

* Note: HAP emission factors for the pouring/casting cooling operations are based on the PM emission factor and percent of PM that is HAP based on information from SPECIATE, v 3.1. Lead emission factors for cupola and electric induction furnaces are from US EPA's AP-42.
All other HAP emission factors are based on the AP-42 emission factors for PM and the percent of PM that is HAP based on information from SPECIATE, v 3.1.

Appendix A: Emission Calculations

HAP Emissions from Foundry Operations
Company Name: Bremen Castings, Inc.
Address: 500 North Baltimore Street, Bremen, Indiana 46506
Part 70 Operating Permit: T099-37432-00001
Significant Source Modification: 099-39928-00001
Reviewer: Rithika Reddy

Process Emissions (cont'd.)

USEPA Speciate v 3.1 Data	
Metal	Gen. Foundry
Manganese	3.100%
Chromium	0.038%
Nickel	0.067%
Arsenic	0.013%
Antimony	0.185%
Lead	0.385%

	Total Potential Emissions Before Controls		**Total Limited Emissions After Controls**	
chromium	0.71	tons/year	0.08	tons/year
nickel	1.25	tons/year	0.14	tons/year
arsenic	0.24	tons/year	0.03	tons/year
Lead	7.64	tons/year	0.84	tons/year
Manganese	64.92	tons/year	6.76	tons/year
Antimony	3.46	tons/year	0.40	tons/year
Total	**78.23**	**tons/year**	**8.25**	**tons/year**

Methodology:
Ef = Emission factor
Ebc = Potential Emissions before controls = Rate (units/hr) x Ef(lbs/unit) x 8760 hrs/yr / 2000 lbs/hr
Eac = Potential Emissions after controls = (1-efficiency/100) x Ebc

Appendix A: Emission Calculations
Gray Iron Foundry
Pouring, Cooling Emissions

Company Name: Bremen Castings, Inc.
Address: 500 North Baltimore Street, Bremen, Indiana 46506
Part 70 Operating Permit: T099-37432-00001
icant Source Modification: 099-39928-00001
Reviewer: Rithika Reddy

Maximum Rate for Pouring/Cooling/Shake out	Tons/hr
	20

Organic HAPs Emission

Analyte	Combined PCS Ef (lbs/ton)	Uncontrolled PTE (tons/yr)
Toluene	0.0450	3.9
Phenol	0.0412	3.6
Benzene	0.1650	14.5
Total HAPs	**0.30**	26.3

METHODOLOGY

HAP Emissions = Usage Rate (tons/hr) * 8760 hrs/yr * EF (lb/ton) * 1 tons/2000 lbs
Emission Factors from permit No. 099-30729-00001, issued on April 27, 2012.

Appendix A: Emission Calculations

Company Name: Bremen Castings, Inc.
Address: 500 North Baltimore Street, Bremen, Indiana 46506
Part 70 Operating Permit: T099-37432-00001
Significant Source Modification: 099-39928-00001
Reviewer: Rithika Reddy

Core Making Process

Machine	Capacity (tons cores/hr)	Maximum Resin Content (%)	VOC Emission Factor from Resin Evaporation	Max. Catalyst Usage (lb/ton cores)	Potential VOC Emissions from resin evap (tons/yr)	Potential VOC Emissions from Catalyst Usage (tons/yr)	Total Potential VOC Emissions (tons/yr)
Isocure #1	1	1.5%	1.5	1.4	6.57	6.13	12.70
Isocure #2	1	1.5%	1.5	1.4	6.57	6.13	12.70
Isocure #3	1	1.5%	1.5	1.4	6.57	6.13	12.70
Total					**19.7**	**18.4**	**38.1**

Note: The source is using a non-HAP DMIPA catalyst.

METHODOLOGY

For Isocure cold box core making, OCMA study shows emission factor of 0.65 lb/ton of cores for VOC emissions from resin evaporation, based on 1% resin usage.
This facility has a maximum resin content of 1.5%, therefore an emission factor of 1.5 lb/ton was used to provide a conservative estimate.
Potential VOC (ton/yr) = Capacity (ton/hr) * Emission Factor (lb/ton) * 8760 hrs/yr * 1 ton/2000 lb

Material	Solvent Name	Density (lb/gal)	Usage Rate (lbs/hr)	Weight % VOC	Potential VOC Emissions (ton/yr)
Isocure Core Making					
Release Agent	Cobra 212	6.84	0.08	90%	0.30
Shell Core Making					
Resin Coated Sand	N/A		1400.00	0.10%	6.13
Release Agent	Nix Stix 46	8.35	0.80	0%	0.00

METHODOLOGY

Potential VOC (ton/yr) = Usage Rate (lb/hr) * Weight % VOC * 8760 hrs/yr * 1 ton/2000 lb
Note: All the above calculations were carried over from the second permit renewal 099 - 30729 - 00001, issued on April 27, 2012.

Appendix A: Emission Calculations
Potential HAP Emission Calculations - Core Making Operations

Company Name: Bremen Castings, Inc.
Address: 500 North Baltimore Street, Bremen, Indiana 46506
Part 70 Operating Permit: T099-37432-00001
Significant Source Modification: 099-39928-00001
Reviewer: Rithika Reddy

Material	Maximum Usage (tons/hr)	Formaldehyde EF (lb/ton sand)	Phenol EF (lb/ton sand)	Naphthalene EF (lb/ton sand)	Potential Formaldehyde Emissions (ton/yr)	Potential Phenol Emissions (ton/yr)	Potential Naphthalene Emissions (ton/yr)
Isocure Core Making Operation - Core Mixing*							
Core sand	3.00	0.0001	0.003	0	0.001	0.039	0
Isocure Core Making Operation - Core Making*							
Core sand	3.00	0.0028	0.0108	0.0131	0.037	0.142	0.172
Isocure Core Making Operation - Core Storage*							
Core sand	3.00	0.0005	0	0.009	0.007	0	0.118
Shell Core Making Operation**							
Resin coated sand	0.70	0.002	0.24	0	0.006	0.736	0
				Total Isocure Core Potential Emissions (tons/yr):	**0.04**	**0.18**	**0.29**

METHODOLOGY

* Isocure core making emission factors from a report titled "Core Room Baseline" prepared by Technikon, LLC for the Casting Emission Reduction Program (CERP) under contract for the US Army published December 9, 2002 for estimating emissions from phenolic urethane Cold Box (Isocure in this case) core mixing, core making and core storage.

** Shell core making emission factors were provided by the supplier of the resin coated sand in a letter included with the orginal Title V permit application.

HAP Emissions = Sand Throughput Rate (tons/hr) * EF (lb/ton sand) * 8760 hours per year * 1 tons/2000 lbs

None of the release agents used in coremaking contain HAPs.

Note: All the above calculations were carried over from the second permit renewal 099 - 30729 - 00001, issued on April 27, 2012.

Appendix A: Emissions Calculations
Core Making

Company Name: **Bremen Castings, Inc.**
Address: **500 North Baltimore Street, Bremen, Indiana 46506**
Part 70 Operating Permit: **T099-37432-00001**
Significant Source Modification: **099-39928-00001**
Reviewer: **Rithika Reddy**

Process	Capacity (lb/day)	Capacity (tons cores/hr)	VOC Emission Factor from Resin Evaporation (lb/ton cores)	Potential VOC Emissions (lb/hr)	Potential VOC Emissions (tons/year)
3-D Printer (Furan No-bake Cores and Molds)	4550	0.095	1.17	0.11	0.49

Process	Throughput (tons/year)	Emission Factor PM (lb/ton)	Emission Factor PM10/PM2.5 (lb/ton)	Potential PM Emissions (tons/year)	Potential PM10/PM2.5 Emissions (tons/year)
Sand Handling (For Cores)	830.37	3.6	0.54	1.49	0.22

Note:
Emission factors were provided by the source referencing AP-42 fire emission factors and emission factors from Ohio Cast Metals Association (OCMA) Study for a phenolic urethane no-bake system as most appropriate for the process.
The annual capacity of the 3-D Printer is 830.37 tons of cores per year.The 3-D Printer can produce cores of varying weight. However, the heaviest core produced would weigh 4550 lbs in a 24 hour machine cycle at 100% area usage.

METHODOLOGY
Potential VOC Emissions (lb/hr) = Capacity (tons cores/hr) * VOC Emission Factor from Resin Evaporation (lb/ton cores)
Potential VOC Emissions (tons/year) = Potential VOC Emissions (lb/hr) * (8760 hrs/1 year)*(1ton/2000 pounds)
Potential Particulate Emissions (tons/year) =Throughput (tons/year)*Emission Factor (lb/ton)

Appendix A: Emissions Calculations
Natural Gas Combustion Only

Company Name: Bremen Castings, Inc.
Address: 500 North Baltimore Street, Bremen, Indiana 46506
Part 70 Operating Permit: T099-37432-00001
Significant Source Modification: 099-39928-00001
Reviewer: Rithika Reddy

Unit ID	Heat Input Capacity (MMBtu/hr)
Cupola hot blast heater	5.2
Cupola afterburner	4.3
Gas #01 - Gas #13	1.5
Dock #01 - Dock #04	3.0
Infra #01IR – Infra #16IR	0.737
Tube #01TIR – Tube #06TIR	0.6
AMU#1 - AMU#6	25.90
Core oven	0.510
Pan heaters	2.40

Unit ID	Heat Input Capacity (MMBtu/hr)
Didion inlet heater	1.30
Shell Core Machine #1	0.15
Shell Core Machine #2	0.15
Shell Core Machine #3	0.15
Shell Core Machine #4	0.15
Shell Core Machine #5	0.125
Shell Core Machine #6	0.125
Shell Core Machine #7	0.093

Heat Input Capacity MMBtu/hr	HHV mmBtu/mmscf	Potential Throughput MMCF/yr
46.4	1020	398.4

	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	7.6	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	0.4	1.5	1.5	0.1	19.9	1.1	16.7

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
PM2.5 emission factor is filterable and condensable PM2.5 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03
Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

HAPS Calculations

	HAPs - Organics					
	Benzene	Dichlorobenz	Formaldehyde	Hexane	Toluene	**Total - Organics**
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03	
Potential Emission in tons/yr	4.183E-04	2.390E-04	1.494E-02	3.586E-01	6.773E-04	**3.748E-01**

	HAPs - Metals					
	Lead	Cadmium	Chromium	Manganese	Nickel	**Total - Metals**
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03	
Potential Emission in tons/yr	9.960E-05	2.191E-04	2.789E-04	7.570E-05	4.183E-04	**1.092E-03**
					Total HAPs	**3.759E-01**
					Worst HAP	**3.586E-01**

Methodology is the same as above.

Appendix A: Emission Calculations
Cupola Limit

Company Name: **Bremen Castings, Inc.**
Address: **500 North Baltimore Street, Bremen, Indiana 46506**
Part 70 Operating Permit: **T099-37432-00001**
Significant Source Modification: **099-39928-00001**
Reviewer: **Rithika Reddy**

Allowable Rate of Emissions (326 IAC 11-1-2)

Process	Process Weight Rate (lbs/hr)	Process Process Weight Rate (tons/hr)	Allowable Emissions (lbs/hr)	Total PM (tons/yr)	Total PM10 (tons/yr)	Total PM2.5 (tons/yr)
Cupola	28000	14	28.80	126.14	126.14	126.14

Note:
Allowable emissions (lb/hr) was calculated by interpolation of data present in Section 2. of 326 IAC 11-1-2
Methodology
Allowable Emissions (tons/yr) = Allowable Emissions (lbs/hr)*8760 (hrs/yr)/2000 lbs/ton
PM=PM10=PM2.5

Appendix A: Emission Calculations
Compliance with 326 IAC 6-3-2

Company Name: **Bremen Castings, Inc.**
Address: **500 North Baltimore Street, Bremen, Indiana 46506**
Part 70 Operating Permit: **T099-37432-00001**
Significant Source Modification: **099-39928-00001**
Reviewer: **Rithika Reddy**

	Emission Unit/ Process	Process Rate (tons/hr)	Allowable Emissions (lb/hr)	PTE (lb/hr)	Control Required	Controlled PTE (lb/hr)	In compliance (after control)
	Charge Handling Operation	15.40	25.61	9.24	N	9.24	Y
	Inoculation (Mg treatment)	8.00	16.51	14.4	N	14.40	Y
	Induction Furnace #1	4.00	10.38	3.6	N	0.47	Y
	Induction Furnace #2	4.00	10.38	3.6	N	0.47	Y
*	Hunter #1	45.20	43.64	-	Y	-	Y
*	Hunter #2	45.20	43.64	-	Y	-	Y
*	Hunter #5	21.90	32.43	-	Y	-	Y
*	Hunter #6	21.90	32.43	-	Y	-	Y
*	Sinto #1	54.00	45.30	-	-	-	-
	Shakeout for all Mold Lines	20.00	30.51	64.00	Y	3.20	Y
	Mold Sand Handling	100.00	51.28	360.00	Y	18.00	Y
	Shell Core Sand Handling	0.70	3.23	2.52	N	0.11	Y
	Isocure Core Sand Handling	3.00	8.56	10.80	Y	0.47	Y
	Shot #1	4.20	10.72	65.10	Y	2.85	Y
	Shot #2	4.20	10.72	65.10	Y	2.85	Y
	Shot #3	4.20	10.72	65.10	Y	2.85	Y
	Grinding/Finishing	8.40	17.06	119.00	Y	5.70	Y

* The throughput to the mold lines includes the sand throughput. This determination was taken from the Part 70 Operating Renewal :T045-30729-00002

Methodology:

$E = 4.10\ P^{0.67}$ for Process weight < 60000 lb/hr

$E = 55.0\ P^{0.11} - 40$ for Process weight > 60000 lb/hr

E = rate of emission in pounds per hour and

P = process weight rate in tons per hour

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.
100 N. Senate Avenue • Indianapolis, IN 46204
(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Eric J. Holcomb
Governor

Bruno L. Pigott
Commissioner

October 18, 2018

Scott Kiechle
BREMEN CASTINGS INC
500 N Baltimore St
Bremen, IN 46506

Re: Public Notice
Bremen Castings
Permit Level: Title V Renewal & Title V Significant Source Mod. (Minor PSD/EO) (120)
Permit Number: 099-37432-00001 & 099-39928-00001

Dear Scott Kiechle:

Enclosed is a copy of your draft Title V Renewal & Title V Significant Source Mod. (Minor PSD/EO) (120), Technical Support Document, emission calculations, and the Public Notice which will be printed in your local newspaper.

The Office of Air Quality (OAQ) has prepared two versions of the Public Notice Document. The abbreviated version will be published in the newspaper, and the more detailed version will be made available on the IDEM's website and provided to interested parties. Both versions are included for your reference. The OAQ has requested that the Plymouth Pilot News in Plymouth, Indiana publish the abbreviated version of the public notice no later than October 23, 2018. You will not be responsible for collecting any comments, nor are you responsible for having the notice published in the newspaper.

OAQ has submitted the draft permit package to the Bremen Public Library, 304 N Jackson St in Bremen IN. As a reminder, you are obligated by 326 IAC 2-1.1-6(c) to place a copy of the complete permit application at this library no later than ten (10) days after submittal of the application or additional information to our department. We highly recommend that even if you have already placed these materials at the library, that you confirm with the library that these materials are available for review and request that the library keep the materials available for review during the entire permitting process.

Please review the enclosed documents carefully. This is your opportunity to comment on the draft permit and notify the OAQ of any corrections that are needed before the final decision. Questions or comments about the enclosed documents should be directed to Rithika Reddy, Indiana Department of Environmental Management, Office of Air Quality, 100 N. Senate Avenue, Indianapolis, Indiana, 46204 or call (800) 451-6027, and ask for extension 4-9694 or dial (317) 234-9694.

Sincerely,
Len Pogost

Len Pogost
Permits Branch
Office of Air Quality

Enclosures
PN Applicant Cover Letter 1/9/2017

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Governor

Bruno Pigott
Commissioner

ATTENTION: PUBLIC NOTICES, LEGAL ADVERTISING

October 18, 2018

Plymouth Pilot News
Attn: Classifieds
P.O. Box 220
Plymouth, IN 46563

Enclosed, please find one Indiana Department of Environmental Management Notice of Public Comment for Bremen Castings, Marshall County, Indiana.

Since our agency must comply with requirements which call for a Notice of Public Comment, we request that you print this notice one time, no later than October 23, 2018.

Please send the invoice, notarized form, clippings showing the date of publication to Bo Liu, at the Indiana Department of Environmental Management, Accounting, Room N1340, 100 North Senate Avenue, Indianapolis, Indiana, 46204.

To ensure proper payment, please reference account # 100174737.

We are required by the Auditor's Office to request that you place the Federal ID Number on all claims. If you have any conflicts, questions, or problems with the publishing of this notice or if you do not receive complete public notice information for this notice, please call Len Pogost at 800-451-6027 and ask for extension 3-2803 or dial 317-233-2803.

Sincerely,

Len Pogost

Len Pogost
Permit Branch
Office of Air Quality

Permit Level: Title V Renewal & Title V Significant Source Mod. (Minor PSD/EO) (120)
Permit Number: 099-37432-00001 & 099-39928-00001

Enclosure

PN Newspaper.dot 1/9/2017

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Eric J. Holcomb
Governor

Bruno L. Pigott
Commissioner

Notice of Public Comment

October 18, 2018
Bremen Castings
099-37432-00001 & 099-39928-00001

Dear Concerned Citizen(s):

You have been identified as someone who could potentially be affected by this proposed air permit. The Indiana Department of Environmental Management, in our ongoing efforts to better communicate with concerned citizens, invites your comment on the draft permit.

Enclosed is a Notice of Public Comment, which has been placed in the Legal Advertising section of your local newspaper. The application and supporting documentation for this proposed permit have been placed at the library indicated in the Notice. These documents more fully describe the project, the applicable air pollution control requirements and how the applicant will comply with these requirements.

If you would like to comment on this draft permit, please contact the person named in the enclosed Public Notice. Thank you for your interest in the Indiana's Air Permitting Program.

Please Note: *If you feel you have received this Notice in error, or would like to be removed from the Air Permits mailing list, please contact Patricia Pear with the Air Permits Administration Section at 1-800-451-6027, ext. 3-6875 or via e-mail at PPEAR@IDEM.IN.GOV. If you have recently moved and this Notice has been forwarded to you, please notify us of your new address and if you wish to remain on the mailing list. Mail that is returned to IDEM by the Post Office with a forwarding address in a different county will be removed from our list unless otherwise requested.*

Enclosure
PN AAA Cover Letter 1/9/2017

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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Bruno L. Pigott
Commissioner

October 18, 2018

To: Bremen Public Library 304 N Jackson St Bremen IN

From: Jenny Acker, Branch Chief
Permits Branch
Office of Air Quality

Subject: **Important Information to Display Regarding a Public Notice for an Air Permit**

Applicant Name: Bremen Castings
Permit Number: 099-37432-00001 & 099-39928-00001

Enclosed is a copy of important information to make available to the public. This proposed project is regarding a source that may have the potential to significantly impact air quality. Librarians are encouraged to educate the public to make them aware of the availability of this information. The following information is enclosed for public reference at your library:

- Notice of a 30-day Period for Public Comment
- Request to publish the Notice of 30-day Period for Public Comment
- Draft Permit and Technical Support Document

You will not be responsible for collecting any comments from the citizens. Please refer all questions and request for the copies of any pertinent information to the person named below.

Members of your community could be very concerned in how these projects might affect them and their families. **Please make this information readily available until you receive a copy of the final package.**

If you have any questions concerning this public review process, please contact Joanne Smiddie-Brush, OAQ Permits Administration Section at 1-800-451-6027, extension 3-0185. Questions pertaining to the permit itself should be directed to the contact listed on the notice.

Enclosures
PN Library 1/9/2017

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Eric J. Holcomb
Governor

Bruno L. Pigott
Commissioner

AFFECTED STATE NOTIFICATION OF PUBLIC COMMENT PERIOD
DRAFT INDIANA AIR PERMIT

October 18, 2018

A 30-day public comment period has been initiated for:

Permit Number: **099-37432-00001 & 099-39928-00001**
Applicant Name: **Bremen Castings**
Location: **Bremen, Marshall County, Indiana**

The public notice, draft permit and technical support documents can be accessed via the **IDEM Air Permits Online** site at:
http://www.in.gov/ai/appfiles/idem-caats/

Questions or comments on this draft permit should be directed to the person identified in the public notice by telephone or in writing to:

Indiana Department of Environmental Management
Office of Air Quality, Permits Branch
100 North Senate Avenue
Indianapolis, IN 46204

Questions or comments regarding this email notification or access to this information from the EPA Internet site can be directed to Chris Hammack at chammack@idem.IN.gov or (317) 233-2414.

Mail Code 61-53

IDEM Staff	LPOGOST 10/18/2018 BREMEN CASTINGS INC 099-37432-00001 & 099-39928-00001 draft			AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender	▶	Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail: **CERTIFICATE OF MAILING ONLY**	

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee Remarks
1		Scott Kiechle BREMEN CASTINGS INC 500 N Baltimore St Bremen IN 46506 (Source CAATS)									
2		James Brown President BREMEN CASTINGS INC 500 N Baltimore St Bremen IN 46506 *(RO CAATS)*									
3		Bremen Public Library 304 N Jackson St Bremen IN 46506-1130 *(Library)*									
4		Marshall County Commissioners 112 West Jefferson Street Plymouth IN 46563 *(Local Official)*									
5		Bremen Town Council and Town Manager 111 South Center Street Bremen IN 46506 *(Local Official)*									
6		Marshall County Health Department 510 W Adams St GL30 Plymouth IN 46563 *(Health Department)*									
7		LaPaz Town Council PO Box 0820 LaPaz IN 46537 *(Local Official)*									
8		Kathy Moore Keramida Environmental, Inc. 401 North College Indianapolis IN 46202 *(Consultant)*									
9		Ms. Julie Grzesiak 139 N. Michigan St. Argos IN 46501 *(Affected Party)*									
10											
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