

**PART 70 OPERATING PERMIT  
and ENHANCED NEW SOURCE REVIEW  
OFFICE OF AIR MANAGEMENT  
and St. Joseph County Health Department**

**South Bend Acquisition Corporation  
220 W. Eckman Street  
South Bend, Indiana 46601**

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

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 and 326 IAC 2-1-3.2 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T141-6210-00010	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Management	Issuance Date:

## SECTION A

## SOURCE SUMMARY

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

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

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The Permittee owns and operates stationary gray and ductile iron foundry

Responsible Official: Jeffrey R. Hipple, Vice President  
Source Address: 220 W. Eckman Street, South Bend, Indiana 46601  
Mailing Address: 220 W. Eckman Street, South Bend, Indiana 46601  
SIC Code: 3321  
County Location: St. Joseph  
County Status: Maintenance attainment for ozone, attainment for all other criteria pollutants  
Source Status: Part 70 Permit Program  
Major Source, under PSD Rules.

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

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

- (1) one (1) scrap and charge handling process, constructed in 1977, with a maximum capacity of 6 tons of iron per hour, with emissions uncontrolled;
- (2) one (1) scrap preheater, constructed in 1980, with a maximum heat input capacity of 2.17 million Btu per hour, with emissions uncontrolled;
- (3) one (1) melting process, with a maximum capacity of 6 tons of iron per hour, uncontrolled, consisting of the following emission units:
  - (a) one (1) electric induction furnace, constructed in September 1983, identified as unit 11A, with a maximum capacity of 1.5 tons of metal per hour, with emissions uncontrolled;
  - (b) one (1) electric induction furnace, constructed in September 1983, identified as unit 11B, with a maximum capacity of 1.5 tons of metal per hour, with emissions uncontrolled;
  - (c) one (1) electric induction furnace, constructed in 1980, identified as unit 11C, with a maximum capacity of 3.0 tons of metal per hour, with emissions uncontrolled;
- (4) one (1) pouring/casting process, constructed prior to 1950, with a maximum capacity of 6 tons of iron per hour, with emissions uncontrolled;
- (5) one (1) castings cooling process, constructed prior to 1950, with a maximum capacity of 6 tons of iron per hour, with emissions uncontrolled;

- ( ) one (1) shakeout system, constructed in 1977, identified as unit 6A, utilized for servicing the Herman and Slinger mold lines, with a maximum capacity of 6 tons of iron per hour and 30 tons of sand per hour, controlled by the north cyclone and a wet scrubber identified as CE-1A;
- ( ) one (1) shakeout system, constructed in 1983, identified as unit 9A, utilized for servicing the Pinlift mold line, with a maximum capacity of 5 tons of iron per hour and 16 tons of sand per hour, with emissions uncontrolled;
- ( ) one (1) castings cleaning/finishing operation consisting of the following emissions units:
  - ( ) one (1) Tumbleblast shotblaster, constructed in November, 1965, identified as unit 3, with a maximum capacity of 12.5 tons of iron castings per hour, using a 6300 acfm baghouse identified as CE-4 as emissions control;
  - ( ) one (1) Tableblast shotblaster, constructed in July, 1967, identified as unit 4, with a maximum capacity of 3.0 tons of iron castings per hour, using a 4500 acfm baghouse identified as CE-2 as control;
  - (c) one (1) Spinnerblast shotblaster, constructed in 1979, identified as unit 7, with a maximum capacity of 1.5 tons of iron castings per hour, using a 4500 acfm baghouse identified as CE-3 as control.
- (9) one (1) coremaking process, with a maximum capacity of 6 tons of iron per hour, uncontrolled, consisting of the following emission units;
  - (a) four (4) Shalco shell core machines, constructed in 1966, identified as emission units 13A through 13D, each with a maximum heat input capacity of 0.4 million British thermal units per hour, each with a maximum capacity of 250 pounds of sand per hour and 6.25 pounds of resin per hour;
  - (b) two (2) Beardsley and Piper corematics, constructed in 1974, identified as emission units 13E and 13F, each with a maximum heat input capacity of 0.5 million British thermal units per hour, each with a maximum capacity of 125 pounds of sand per hour and 3.125 pounds of resin per hour;
  - (c) one (1) Beardsley and Piper Petibone, constructed in 1974, identified as unit 13G, with a maximum heat input capacity of 0.2 million British thermal units per hour, with a maximum capacity of 150 pounds of sand per hour and 3.75 pounds of resin per hour;
  - (d) one (1) Howard water based core wash drying oven, constructed in 1987, identified as unit 15A, with a maximum heat input capacity of 0.2 million British thermal units per hour, with emissions exhausting through stack S3;
  - (e) one (1) Feco-A-Bangor Punta water based core wash drying oven, constructed in 1987, identified as unit 15B, with a maximum heat input capacity of 0.2 million British thermal units per hour, with emissions exhausting through stack S2;
  - (f) one (1) Dry-Sys Equipment core curing oven, constructed in 1956, identified as unit 15C, with a maximum heat input capacity of 0.2 million British thermal units per hour, with emissions uncontrolled and exhausting through stack S1;

- (g) one (1) oil sand core making process, identified as unit 17, constructed prior to 1970, with a maximum capacity of 110 pounds of sand per hour and 3.52 pounds of binder per hour;
- (h) one (1) no-bake core making process, identified as unit 20, constructed in 1976, with a maximum capacity of 1.25 tons of sand per hour and 0.015 tons of resin per hour;
- (10) one (1) muller green sand handling system including two (2) sand storage bins, each with a capacity of 150 tons, identified as unit 5, constructed in August 1976, with a maximum capacity of 60 tons of sand per hour, with emissions controlled by a wet scrubber, identified as CE-1B;
- (11) one (1) oil/shell core sand handling system, including two silos each with a capacity of 25 tons of sand, identified as unit 10A, constructed in 1977, with a maximum capacity of 2.11 tons of sand per hour, with emissions uncontrolled;
- (12) one (1) no-bake sand handling system, identified as unit 10, located in the south yard, constructed prior to 1970, with a maximum capacity of 1.25 tons of sand per hour, with emissions uncontrolled, and consisting of the following emission units:
  - (a) one (1) pneumatic air driven silo with a maximum capacity of 75 tons of sand; and
  - (b) one (1) sand hopper with a maximum capacity of 15 tons of sand.
- (13) one (1) Alphaset sand handling system, including one silo with a capacity of 50 tons of sand and one (1) storage hopper with a capacity of 10 tons, identified as unit 10B, constructed in 1976, with a maximum capacity of 5.0 tons of sand per hour, with emissions uncontrolled;
- (14) one (1) Slinger mold making operation including two (2) sand storage bins each with a capacity of 10 tons, identified as unit number 8, constructed in 1987, with a maximum capacity of 20 molds per hour, 10 tons of iron per hour, 20 tons of sand per hour, 640 pounds of customix per hour, and 12.8 pounds of alphaset per hour;
- (15) one (1) Herman mold making operation including two (2) sand storage bins, each with a capacity of 10 tons, constructed in 1977, with a maximum capacity of 20 molds per hour, 10 tons of iron per hour, 30 tons of sand per hour, and 960 pounds of customix per hour;
- (16) one (1) Pin-Lift mold making operation, constructed in 1970, with a maximum capacity of 35 molds per hour, 5 tons of iron per hour, 16 tons of sand per hour, and 512 pounds of customix per hour; and
- (17) one (1) magnesium treatment process for producing ductile iron, identified as unit number 22, constructed in 1977, with a maximum capacity of 6.0 tons of iron per hour, with emissions controlled with the use of the Sigmat process. The Sigmat process is essentially a box enclosure which holds the magnesium. The iron is poured into the box to react with the magnesium and smoke is unable to escape.

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

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

- (1) six (6) snag grinders, constructed in 1970, identified as units 2A through 2D, using a 20,535 acfm baghouse identified as CE-5 for emissions control;
- (2) nine (9) portable grinders, constructed in 1960, identified as units 2E through 2K, with emissions uncontrolled; and
- (3) one (1) welding/grinding station, constructed in 1960, identified as unit 2L, with emissions uncontrolled.

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

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

- (1) It is a major source, as defined in 326 IAC 2-7-1(22); and
- (2) 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 Permit No Defense [326 IAC 2-1-10] [IC 13]**

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- (a) Indiana statutes from IC 13 and rules from 326 IAC, quoted 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.
- (b) This prohibition shall not apply to alleged violations of applicable requirements for which the Commissioner has granted a permit shield in accordance with 326 IAC 2-1-3.2 or 326 IAC 2-7-15, as set out in this permit in the Section B condition entitled "Permit Shield."

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

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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, any applicable definitions found in IC 13-11, 326 IAC 1-2 and 326 IAC 2-7 shall prevail.

### **B.3 Permit Term [326 IAC 2-7-5(2)]**

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This permit is issued for a fixed term of five (5) years from the effective date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3.

### **B.4 Enforceability [326 IAC 2-7-7(a)]**

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- (a) All terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM .
- (b) Unless otherwise stated, terms and conditions of this permit, including any provisions to limit the source's potential to emit, are enforceable by the United States Environmental Protection Agency (U.S. EPA) and citizens under the Clean Air Act.
- (c) All terms and conditions in this permit that are local requirements, including any provisions designed to limit the source's potential to emit, are enforceable by the St. Joseph County Health Department.

### **B.5 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]**

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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.6 Severability [326 IAC 2-7-5(5)]**

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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)]**

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

### **B.8 Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)]**

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- (a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

and

St. Joseph County Health Department  
County-City Building, Room 914  
South Bend, Indiana 46601-1870

- (b) The Permittee shall furnish to IDEM, OAM, and St. Joseph County Health Department within a reasonable time, any information that IDEM, OAM, and St. Joseph County Health Department 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.
- (c) Upon request, the Permittee shall also furnish to IDEM, OAM, and St. Joseph County Health Department copies of records required to be kept by this permit. If the Permittee wishes to assert a claim of confidentiality over any of the furnished records, the Permittee must furnish such records to IDEM, OAM, and St. Joseph County Health Department along with a claim of confidentiality under 326 IAC 17. If requested by IDEM, OAM, or the U.S. EPA, to furnish copies of requested records directly to U. S. EPA, and if the Permittee is making a claim of confidentiality regarding the furnished records, then the Permittee must furnish such confidential records directly to the U.S. EPA along with a claim of confidentiality under 40 CFR 2, Subpart B.

B.9 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]

- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit constitutes a violation of the Clean Air Act and is grounds for:
  - (1) Enforcement action;
  - (2) Permit termination, revocation and reissuance, or modification; or
  - (3) Denial of a permit renewal application.
- (b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

B.10 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)]

- (a) Any application form, report, or compliance certification submitted under this permit shall contain certification by a responsible official of truth, accuracy, and completeness. This certification, and any other certification required under this permit, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, on the attached Certification Form, with each submittal.

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

B.11 Annual Compliance Certification [326 IAC 2-7-6(5)]

- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The certification shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than April 15 of each year to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

and

St. Joseph County Health Department  
County-City Building, Room 914  
South Bend, Indiana 46601-1870

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, OAM, and St. Joseph County Health Department on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
- (1) The identification of each term or condition of this permit that is the basis of the certification;
  - (2) The compliance status;
  - (3) Whether compliance was based on continuous or intermittent data;
  - (4) The methods used for determining compliance of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3);
  - (5) Any insignificant activity that has been added without a permit revision; and
  - (6) Such other facts, as specified in Sections D of this permit, as IDEM, OAM, and St. Joseph County Health Department may require to determine the compliance status of the source.

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

B.12 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)]  
[326 IAC 1-6-3]

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(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this permit, including the following information on each facility:

- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
- (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;
- (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

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

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

and

St. Joseph County Health Department  
County-City Building, Room 914  
South Bend, Indiana 46601-1870

- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that lack of proper maintenance does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP's shall be submitted to IDEM, OAM, and St. Joseph County Health Department upon request and shall be subject to review and approval by IDEM, OAM, and St. Joseph County Health Department.

B.13 Emergency Provisions [326 IAC 2-7-16]

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(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, except as provided in 326 IAC 2-7-16.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or 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, OAM, and St. Joseph County Health Department 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 Management, Compliance Section), or  
Telephone Number: 317-233-5674 (ask for Compliance Section)  
Facsimile Number: 317-233-5967

and

St. Joseph County Health Department  
Telephone Number: 219-235-9775  
Facsimile Number: 219-235-7558

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted notice, either in writing or facsimile, of the emergency to:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

and

St. Joseph County Health Department  
County-City Building, Room 914  
South Bend, Indiana 46601-1870

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

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

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

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

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions) for sources subject to this rule after the effective date of this rule. This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAM, and St. Joseph County Health Department may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(9) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAM, and St. Joseph County Health Department by telephone or facsimile of an emergency lasting more than one (1) hour in compliance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
  - (1) 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.
  - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
    - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
    - (B) Continued operation of the facilities is 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.

Any operation shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

**B.14 Permit Shield [326 IAC 2-7-15]**

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- (a) This condition provides a permit shield as addressed in 326 IAC 2-7-15.
- (b) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits. Compliance with the conditions of this permit shall be deemed in compliance with any applicable requirements as of the date of permit issuance, provided that:

- (1) The applicable requirements are included and specifically identified in this permit; or
  - (2) The permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable.
- (c) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, including any term or condition from a previously issued construction or operation permit, IDEM, OAM, and St. Joseph County Health Department shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (d) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application.
- (e) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
- (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
  - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
  - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
  - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (f) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (g) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAM, and St. Joseph County Health Department has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (h) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAM, and St. Joseph County Health Department has issued the modification. [326 IAC 2-7-12(b)(8)]

**B.15 Multiple Exceedances [326 IAC 2-7-5(1)(E)]**

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Any exceedance of a permit limitation or condition contained in this permit, which occurs contemporaneously with an exceedance of an associated surrogate or operating parameter established to detect or assure compliance with that limit or condition, both arising out of the same act or occurrence, shall constitute a single potential violation of this permit.

B.16 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

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

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

and

St. Joseph County Health Department  
County-City Building, Room 914  
South Bend, Indiana 46601-1870

within ten (10) calendar days from the date of the discovery of the deviation.

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:
- (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
  - (2) An emergency as defined in 326 IAC 2-7-1(12); or
  - (3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.
  - (4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.

- (c) Written notification shall be submitted on the attached Emergency/Deviation Occurrence Reporting Form or its substantial equivalent. The notification does not need to be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) Proper notice submittal under 326 IAC 2-7-16 satisfies the requirement of this subsection.

B.17 Permit Modification, Reopening, Revocation and Reissuance, or Termination  
[326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]

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

- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAM, and St. Joseph County Health Department 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, OAM, and St. Joseph County Health Department 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, OAM, and St. Joseph County Health Department at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAM, and St. Joseph County Health Department may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

**B.18 Permit Renewal [326 IAC 2-7-4]**

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- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAM, and St. Joseph County Health Department and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

and

St. Joseph County Health Department  
County-City Building, Room 914  
South Bend, Indiana 46601-1870

- (b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]
  - (1) A timely renewal application is one that is:
    - (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

- (B) 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, OAM, and St. Joseph County Health Department on or before the date it is due. [326 IAC 2-5-3]
- (2) If IDEM, OAM, and St. Joseph County Health Department, upon receiving a timely and complete 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.
- (c) Right to Operate After Application for Renewal [326 IAC 2-7-3]  
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, OAM, and St. Joseph County Health Department, takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAM, and St. Joseph County Health Department, any additional information identified as being needed to process the application.
- (d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)]  
If IDEM, OAM, and St. Joseph County Health Department fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

B.19 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:  
  
Indiana Department of Environmental Management  
Permits Branch, Office of Air Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015  
  
and  
  
St. Joseph County Health Department  
County-City Building, Room 914  
South Bend, Indiana 46601-1870  
  
Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule
- (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.20 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)]  
[326 IAC 2-7-12 (b)(2)]

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- (a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.
- (b) Notwithstanding 326 IAC 2-7-12(b)(1)(D)(i) 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.21 Changes Under Section 502(b)(10) of the Clean Air Act [326 IAC 2-7-20(b)]

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The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a) and the following additional conditions:

- (a) For each such change, the required written notification shall include a brief description of the change within the source, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.
- (b) The permit shield, described in 326 IAC 2-7-15, shall not apply to any change made under 326 IAC 2-7-20(b).

B.22 Operational Flexibility [326 IAC 2-7-20]

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

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

Indiana Department of Environmental Management  
Permits Branch, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

and

St. Joseph County Health Department  
County-City Building, Room 914  
South Bend, Indiana 46601-1870

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 which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-7-20(b), (c), or (e) and makes such records available, upon reasonable request, for public review.

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

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

- (c) Emission Trades [326 IAC 2-7-20(c)]  
The Permittee may trade increases and decreases in emissions in 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, OAM, 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.23 Construction Permit Requirement [326 IAC 2]

Except as allowed by Indiana P.L. 130-1996 Section 12, as amended by P.L. 244-1997, modification, construction, or reconstruction shall be approved as required by and in accordance with 326 IAC 2.

B.24 Inspection and Entry [326 IAC 2-7-6(2)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, the Permittee shall allow IDEM, OAM, and St. Joseph County Health Department 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) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.  
[326 IAC 2-7-6(6)]
  - (1) The Permittee may assert a claim that, in the opinion of the Permittee, information removed or about to be removed from the source by IDEM, OAM, and St. Joseph County Health Department or an authorized representative, contains information that is confidential under IC 5-14-3-4(a). The claim shall be made in writing before or at the time the information is removed from the source. In the event that a claim of confidentiality is so asserted, neither IDEM, OAM, and St. Joseph County Health Department nor an authorized representative, may disclose the information unless and until IDEM, OAM, and St. Joseph County Health Department makes a determination under 326 IAC 17-1-7 through 326 IAC 17-1-9 that the information is not entitled to confidential treatment and that determination becomes final. [IC 5-14-3-4; IC 13-14-11-3; 326 IAC 17-1-7 through 326 IAC 17-1-9]
  - (2) The Permittee, and IDEM, OAM, and St. Joseph County Health Department acknowledge that the federal law applies to claims of confidentiality made by the Permittee with regard to information removed or about to be removed from the source by U.S. EPA. [40 CFR Part 2, Subpart B]

**B.25 Transfer of Ownership or Operation [326 IAC 2-1-6] [326 IAC 2-7-11]**

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Pursuant to 326 IAC 2-1-6 and 326 IAC 2-7-11:

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAM, Permits Branch and St. Joseph County Health Department, within thirty (30) days of the change. Notification shall include a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the Permittee and the new owner.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by an administrative amendment pursuant to 326 IAC 2-7-11. The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) IDEM, OAM, and St. Joseph County Health Department shall reserve the right to issue a new permit.

**B.26 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]**

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- (a) The Permittee shall pay annual fees to IDEM, OAM, within thirty (30) calendar days of receipt of a billing. If the Permittee does not receive a bill from IDEM, OAM the applicable fee is due April 1 of each year.
- (b) 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 317-233-0425 (ask for OAM, Technical Support and Modeling Section), to determine the appropriate permit fee.

**B.27 Enhanced New Source Review [326 IAC 2]**

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The requirements of the construction permit rules in 326 IAC 2 are satisfied by this permit for any previously unpermitted facilities and facilities to be constructed within eighteen (18) months after the date of issuance of this permit, as listed in Sections A.2 and A.3.

## SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

**C.1 Particulate Matter Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [326 IAC 6-3-2(c)]**

Pursuant to 326 IAC 6-3-2(c), the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.

**C.2 Opacity [326 IAC 5-1]**

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

- (a) Opacity shall not exceed an average of thirty percent (30%) 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 overlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

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

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

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

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

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

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

**C.6 Operation of Equipment [326 IAC 2-7-6(6)]**

All air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

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

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

C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61.140]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
- (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
  - (2) If there is a change in the following:
    - (A) Asbestos removal or demolition start date;
    - (B) Removal or demolition contractor; or
    - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management  
Asbestos Section, Office of Air Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

and

St. Joseph County Health Department  
County-City Building, Room 914  
South Bend, Indiana 46601-1870

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

- (e) **Procedures for Asbestos Emission Control**  
The Permittee shall comply with the emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4 emission control requirements are mandatory 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) **Indiana Accredited Asbestos Inspector**  
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited is federally enforceable.

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

#### **C.9 Performance Testing [326 IAC 3-6]**

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- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing methods approved by IDEM, OAM.

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

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

and

St. Joseph County Health Department  
County-City Building, Room 914  
South Bend, Indiana 46601-1870

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

- (b) All test reports must be received by IDEM, OAM within forty-five (45) days after the completion of the testing. An extension may be granted by the Commissioner, if the source submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

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

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

C.10 Compliance Schedule [326 IAC 2-7-6(3)]

The Permittee:

- (a) Has certified that all facilities at this source are in compliance with all applicable requirements; and
- (b) Has submitted a statement that the Permittee will continue to comply with such requirements; and
- (c) Will comply with such applicable requirements that become effective during the term of this permit.

C.11 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment, no more than ninety (90) days after receipt of this permit. If due to circumstances beyond its control, this schedule cannot be met, the Permittee may extend compliance schedule an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

and

St. Joseph County Health Department  
County-City Building, Room 914  
South Bend, Indiana 46601-1870

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

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

C.12 Maintenance of Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

- (a) In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than one (1) hour until such time as the continuous monitor is back in operation.
- (b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

**C.13 Monitoring Methods [326 IAC 3]**

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Any monitoring or testing performed to meet the applicable requirements of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

**C.14 Pressure Gauge Specifications**

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Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ( $\pm 2\%$ ) of full scale reading.

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

**C.15 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]**

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

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

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

and

St. Joseph County Health Department  
County-City Building, Room 914  
South Bend, Indiana 46601-1870

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

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

- (c) If the ERP is disapproved by IDEM, OAM, or the St. Joseph County Health Department, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.
- (d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.
- (e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.

- (f) Upon direct notification by IDEM, OAM, and the St. Joseph County Health Department, 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.16 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present in a process in more than the threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall:

- (a) Submit:
- (1) A compliance schedule for meeting the requirements of 40 CFR 68 by the date provided in 40 CFR 68.10(a); or
  - (2) As a part of the compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP); and
  - (3) A verification to IDEM, OAM, and St. Joseph County Health Department that a RMP or a revised plan was prepared and submitted as required by 40 CFR 68.
- (b) Provide annual certification to IDEM, OAM, and St. Joseph County Health Department that the Risk Management Plan is being properly implemented.

All documents submitted pursuant to this condition shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

C.17 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5][326 IAC 2-7-6] [326 IAC 1-6]

- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:
- (1) This condition;
  - (2) The Compliance Determination Requirements in Section D of this permit;
  - (3) The Compliance Monitoring Requirements in Section D of this permit;
  - (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
  - (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAM and St. Joseph County Health Department upon request and shall be subject to review and approval by IDEM, OAM, and St. Joseph County Health Department. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of :

- (A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and
  - (B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.
- (c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:
- (1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
  - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied or;
  - (3) An automatic measurement was taken when the process was not operating; or
  - (4) The process has already returned to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

C.18 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]  
[326 IAC 2-7-6]

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- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAM, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. IDEM, OAM shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAM within thirty (30) days of receipt of the notice of deficiency. IDEM, OAM reserves the authority to use enforcement activities to resolve noncompliant stack tests.

- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAM that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate permit conditions may be grounds for immediate revocation of the permit to operate the affected facility.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

**C.19 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]**

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- (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by April 15 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:
- (1) Indicate actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
  - (2) Indicate actual emissions of other regulated pollutants from the source, for purposes of Part 70 fee assessment.
- (b) The annual emission statement covers the twelve (12) consecutive month time period starting December 1 and ending November 30. The annual emission statement must be submitted to:

Indiana Department of Environmental Management  
Technical Support and Modeling Section, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

and

St. Joseph County Health Department  
County-City Building, Room 914  
South Bend, Indiana 46601-1870

- (c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, and St. Joseph County Health Department on or before the date it is due.

**C.20 Monitoring Data Availability [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]**

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- (a) With the exception of performance tests conducted in accordance with Section C-Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.

- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.
- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.
- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.
- (e) At its discretion, IDEM and St. Joseph County Health Department may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.
- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.21 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAM, and St. Joseph County Health Department representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner or the Joseph County Health Department makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or St. Joseph County Health Department within a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:
  - (1) The date, place, and time of sampling or measurements;
  - (2) The dates analyses were performed;
  - (3) The company or entity performing the analyses;
  - (4) The analytic techniques or methods used;
  - (5) The results of such analyses; and
  - (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
  - (1) Copies of all reports required by this permit;
  - (2) All original strip chart recordings for continuous monitoring instrumentation;

- (3) All calibration and maintenance records;
  - (4) Records of preventive maintenance shall be sufficient to demonstrate that improper maintenance did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.
- (d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.22 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

- (a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Quarterly Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported.
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:  
  
Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015  
  
and  
  
St. Joseph County Health Department  
County-City Building, Room 914  
South Bend, Indiana 46601-1870
- (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, OAM, and St. Joseph County Health Department on or before the date it is due.
- (d) Unless otherwise specified in this permit, any quarterly report shall be submitted within thirty (30) days of the end of the reporting period.
- (e) All instances of deviations as described in Section B- Deviations from Permit Requirements Conditions must be clearly identified in such reports.
- (f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.

- (g) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

### **Stratospheric Ozone Protection**

#### **C.23 Compliance with 40 CFR 82 and 326 IAC 22-1**

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

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

## SECTION D.1 FACILITY OPERATION CONDITIONS

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

- (a) one (1) scrap and charge handling process, constructed in 1977, with a maximum capacity of 6 tons of iron per hour, with emissions uncontrolled;
- (b) one (1) scrap preheater, constructed in 1980, with a maximum heat input capacity of 2.17 million Btu per hour, with emissions uncontrolled.

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

#### D.1.1 Nonattainment Area Particulate Limitations [326 IAC 6-1-2]

Pursuant to 326 IAC 6-1-2, the following conditions shall apply:

- (a) The PM emissions from the scrap and charge handling operation shall not exceed 0.03 grains per dry standard cubic foot of exhaust air.
- (b) The PM emissions from the scrap preheater shall not exceed 0.03 grains per dry standard cubic foot of exhaust air.

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

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

### Compliance Determination Requirements

#### D.1.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.1.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

## SECTION D.2 FACILITY OPERATION CONDITIONS

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

one (1) melting process, with a maximum capacity of 6 tons of iron per hour, uncontrolled, consisting of the following emission units;

- (1) one (1) electric induction furnace, constructed in September 1983, identified as unit 11A, with a maximum capacity of 1.5 tons of metal per hour, with emissions uncontrolled;
- (2) one (1) electric induction furnace, constructed in September 1983, identified as unit 11B, with a maximum capacity of 1.5 tons of metal per hour, with emissions uncontrolled; and
- (3) one (1) electric induction furnace, constructed in 1980, identified as unit 11C, with a maximum capacity of 3.0 tons of metal per hour, with emissions uncontrolled.

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

#### D.2.1 Nonattainment Area Particulate Limitations [326 IAC 6-1-2]

Pursuant to 326 IAC 6-1-2, the particulate matter (PM) from each of the three electric induction furnaces shall not exceed 0.07 grains per dry standard cubic foot of exhaust air.

#### D.2.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

### Compliance Determination Requirements

#### D.2.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

Within 36 months after the issuance of this permit, the Permittee shall perform PM testing on each of the furnaces (or on a representative furnace as determined by the OAM during protocol review) using methods as approved by the Commissioner, in order to demonstrate compliance with condition D.2.1. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

### **SECTION D.3 FACILITY OPERATION CONDITIONS**

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

one (1) pouring/casting process, constructed prior to 1950, with a maximum capacity of 6 tons of iron per hour, with emissions uncontrolled.

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

**D.3.1 Nonattainment Area Particulate Limitations [326 IAC 6-1-2]**

Pursuant to 326 IAC 6-1-2, the particulate matter (PM) from each of the pouring/casting process shall not exceed 0.03 grains per dry standard cubic foot of exhaust air.

**D.3.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]**

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

**Compliance Determination Requirements**

**D.3.3 Testing Requirements [326 IAC 2-7-6(1),(6)]**

Within 48 months after the issuance of this permit, the Permittee shall perform PM testing using methods as approved by the Commissioner, in order to demonstrate compliance with condition D.3.1. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

## **SECTION D.4 FACILITY OPERATION CONDITIONS**

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

one (1) castings cooling process, constructed prior to 1950, with a maximum capacity of 6 tons of iron per hour, with emissions uncontrolled.

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

**D.4.1 Nonattainment Area Particulate Limitations [326 IAC 6-1-2]**

Pursuant to 326 IAC 6-1-2, the particulate matter (PM) from each of the castings cooling process shall not exceed 0.03 grains per dry standard cubic foot of exhaust air.

**D.4.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]**

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

### **Compliance Determination Requirements**

**D.4.3 Testing Requirements [326 IAC 2-7-6(1),(6)]**

The Permittee is not required to test this facility by this permit. However IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.4.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

## SECTION D.5 FACILITY OPERATION CONDITIONS

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

one (1) shakeout system, constructed in 1977, identified as unit 6A, utilized for servicing the Herman and Slinger mold lines, with a maximum capacity of 6 tons of iron per hour and 30 tons of sand per hour, controlled by the north cyclone and a wet scrubber identified as CE-1A.

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

#### D.5.1 Nonattainment Area Particulate Limitations [326 IAC 6-1-2]

Pursuant to 326 IAC 6-1-2, the particulate matter (PM) from the Herman and Slinger shakeout system (unit 6A) shall not exceed 0.03 grains per dry standard cubic foot of exhaust air.

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

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

### Compliance Determination Requirements

#### D.5.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

Within 24 months after the issuance of this permit, the Permittee shall perform PM testing using methods as approved by the Commissioner, in order to demonstrate compliance with condition D.5.1. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

#### D.5.4 Particulate Matter (PM)

The wet scrubber CE-1A for PM control shall be in operation at all times when the Herman and Slinger castings shakeout process (unit 6A) is in operation.

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

#### D.5.5 Visible Emissions Notations

- (a) Daily visible emission notations of the wet scrubber CE-1A stack exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

#### D.5.6 Parametric Monitoring

The Permittee shall monitor and record the pressure drop and flow rate of the scrubber, at least once per shift. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across the wet scrubber shall be maintained within the range of 4 to 9.5 inches of water or a range established during the latest stack test. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the flow rates shall be maintained at a minimum of 75 gallons per minute or a minimum flow rate established during the latest stack test. The Compliance Response Plan for the scrubber shall contain troubleshooting contingency and response steps for when the pressure drop or flow rate readings are outside of the normal ranges for any one reading.

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

#### D.5.7 Scrubber Inspections

An inspection shall be performed each calendar quarter of the scrubber CE-1A controlling the Herman and Slinger castings shakeout process (unit 6A) when venting to the atmosphere. All defective scrubber parts shall be replaced.

#### D.5.8 Scrubber Failure

In the event that scrubber failure has been observed:

- (a) The affected process will be shut down immediately until the failed unit has been replaced.
- (b) Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion.

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

#### D.5.9 Record Keeping Requirements

- (a) To document compliance with Condition D.5.5, the Permittee shall maintain records of daily visible emission notations of the scrubber stack exhaust.
- (b) To document compliance with Condition D.5.6, the Permittee shall maintain records of the pressure drop readings and flow rate readings of the scrubber.
- (c) To document compliance with Condition D.5.7, the Permittee shall maintain records of the results of the inspections required under Condition D.5.7 and the types and numbers of any parts replaced.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

## SECTION D.6 FACILITY OPERATION CONDITIONS

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

one (1) shakeout system, constructed in 1983, identified as unit 9A, utilized for servicing the Pinlift mold line, with a maximum capacity of 5 tons of iron per hour and 16 tons of sand per hour, with emissions uncontrolled;

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

#### D.6.1 Nonattainment Area Particulate Limitations [326 IAC 6-1-2]

Pursuant to 326 IAC 6-1-2 (Nonattainment Area Particulate Limitations), the particulate matter (PM) from the Pinlift shakeout system (unit 9A) shall not exceed 0.03 grains per dry standard cubic foot of exhaust air.

#### D.6.2 Best Available Control Technology (BACT) [326 IAC 8-1-6]

In order to render the requirements of 326 IAC 8-1-6 (BACT) not applicable the metal throughput to the Pinlift shakeout system (unit 9A) shall not exceed 39,998 tons per 12 consecutive month period. Therefore the requirements of 326 IAC 8-1-6 (BACT) shall not apply.

#### D.6.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

### Compliance Determination Requirements

#### D.6.4 Testing Requirements [326 IAC 2-7-6(1),(6)]

Within 24 months after the issuance of this permit, the Permittee shall perform PM testing using methods as approved by the Commissioner, in order to demonstrate compliance with condition D.6.1. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

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

#### D.6.5 Visible Emissions Notations

- (a) Daily visible emission notations of the Pinlift shakeout system (unit 9A) stack exhausts shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

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

**D.6.6 Record Keeping Requirements**

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- (a) In order to document compliance with Condition D.6.5, the Permittee shall maintain records of daily visible emission notations of the control device stack exhaust.
- (b) In order to document compliance with Condition D.6.2, the Permittee shall maintain records of the metal throughput to the Pinlift shakeout system (unit 9A).
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

**D.6.7 Reporting Requirements**

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A quarterly summary of the information to document compliance with Condition D.6.2 shall be submitted to the addresses listed in Section C - General Reporting Requirements, using the reporting form located at the end of this permit, or its equivalent, within thirty (30) days after the end of the quarter being reported.

## SECTION D.7 FACILITY OPERATION CONDITIONS

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

one (1) Tumbleblast shotblaster, constructed in November, 1965, identified as unit 3, with a maximum capacity of 12.5 tons of iron castings per hour, using a 6300 acfm baghouse identified as CE-4 as emissions control.

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

#### D.7.1 Nonattainment Area Particulate Limitations [326 IAC 6-1-18]

Pursuant to 326 IAC 6-1-18 (Nonattainment Area Particulate Limitations), the particulate matter (PM) emissions from the Tumbleblast shotblaster shall not exceed 0.030 grains per dry standard cubic foot of exhaust air and 5.0 tons per year.

#### D.7.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

### Compliance Determination Requirements

#### D.7.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

Within 180 days after the issuance of this permit, the Permittee shall perform PM testing of the Tumbleblast shotblaster, using methods as approved by the Commissioner, in order to demonstrate compliance with condition D.7.1. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

#### D.7.4 Particulate Matter (PM)

The baghouse CE-4 for PM control shall be in operation at all times when the Tumbleblast shotblaster is in operation.

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

#### D.7.5 Visible Emissions Notations

- (a) Daily visible emission notations of the baghouse CE-4 stack exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

#### D.7.6 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse CE-4 used in conjunction with the Tumbleblast shotblaster, at least once daily when the shotblaster is in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 2.0 and 8.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

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

#### D.7.7 Baghouse Inspections

An inspection shall be performed each calendar quarter of all bags controlling the Tumbleblast shotblaster when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors. All defective bags shall be replaced.

#### D.7.8 Broken or Failed Bag Detection

In the event that bag failure has been observed.

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
- (b) For single compartment baghouses, 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).

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

#### D.7.9 Record Keeping Requirements

- (a) To document compliance with Condition D.7.5, the Permittee shall maintain records of daily visible emission notations of the baghouse CE-4 stack exhaust.
- (b) To document compliance with Condition D.7.6, the Permittee shall maintain the following:

- (1) Daily records of the following operational parameters during normal operation when venting to the atmosphere:
    - (A) Inlet and outlet differential static pressure; and
    - (B) Cleaning cycle: frequency and differential pressure.
  - (2) Documentation of all response steps implemented, per event .
  - (3) Operation and Compliance Response logs, including work purchases orders, shall be maintained.
  - (4) Quality Assurance/Quality Control (QA/QC) procedures.
  - (5) Operator standard operating procedures (SOP).
  - (6) Manufacturer's specifications or its equivalent.
  - (7) Equipment "troubleshooting" contingency plan.
  - (8) Documentation of the dates vents are redirected.
- (c) To document compliance with Condition D.7.7, the Permittee shall maintain records of the results of the inspections required under Condition D.7.7 and the dates the vents are redirected.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

## SECTION D.8 FACILITY OPERATION CONDITIONS

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

one (1) Tableblast shotblaster, constructed in July, 1967, identified as unit 4, with a maximum capacity of 3.0 tons of iron castings per hour, using a 4500 acfm baghouse identified as CE-2 as control.

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

#### D.8.1 Nonattainment Area Particulate Limitations [326 IAC 6-1-18]

Pursuant to 326 IAC 6-1-18 (Nonattainment Area Particulate Limitations), the particulate matter (PM) emissions from the Tableblast shotblaster shall not exceed 0.037 grains per dry standard cubic foot of exhaust air and 4.3 tons per year.

#### D.8.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

### Compliance Determination Requirements

#### D.8.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

Within 180 days after the issuance of this permit, the Permittee shall perform PM testing of the Tableblast shotblaster, using methods as approved by the Commissioner, in order to demonstrate compliance with condition D.8.1. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

#### D.8.4 Particulate Matter (PM)

The baghouse CE-2 for PM control shall be in operation at all times when the Tableblast shotblaster is in operation.

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

#### D.8.5 Visible Emissions Notations

- (a) Daily visible emission notations of the baghouse CE-2 stack exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

#### D.8.6 Parametric Monitoring

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The Permittee shall record the total static pressure drop across the baghouse CE-2 used in conjunction with the Tableblast shotblaster, at least once daily when the shotblaster is in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 2.0 and 8.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

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

#### D.8.7 Baghouse Inspections

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An inspection shall be performed each calendar quarter of all bags controlling the Tableblast shotblaster when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors. All defective bags shall be replaced.

#### D.8.8 Broken or Failed Bag Detection

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In the event that bag failure has been observed.

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
- (b) For single compartment baghouses, 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).

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

#### D.8.9 Record Keeping Requirements

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- (a) To document compliance with Condition D.8.5, the Permittee shall maintain records of daily visible emission notations of the baghouse CE-2 stack exhaust.
- (b) To document compliance with Condition D.8.6, the Permittee shall maintain the following:
  - (1) Daily records of the following operational parameters during normal operation when venting to the atmosphere:

- (A) Inlet and outlet differential static pressure; and
- (B) Cleaning cycle: frequency and differential pressure.
- (2) Documentation of all response steps implemented, per event .
- (3) Operation and Compliance Response logs, including work purchases orders, shall be maintained.
- (4) Quality Assurance/Quality Control (QA/QC) procedures.
- (5) Operator standard operating procedures (SOP).
- (6) Manufacturer's specifications or its equivalent.
- (7) Equipment "troubleshooting" contingency plan.
- (8) Documentation of the dates vents are redirected.
- (c) To document compliance with Condition D.8.7, the Permittee shall maintain records of the results of the inspections required under Condition D.8.7 and the dates the vents are redirected.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

## SECTION D.9 FACILITY OPERATION CONDITIONS

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

one (1) Spinnerblast shotblaster, constructed in 1979, identified as unit 7, with a maximum capacity of 1.5 tons of iron castings per hour, using a 4500 acfm baghouse identified as CE-3 as control.

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

#### D.9.1 Nonattainment Area Particulate Limitations [326 IAC 6-1-2]

Pursuant to 326 IAC 6-1-2 (Nonattainment Area Particulate Limitations), the particulate matter (PM) emissions from the Spinnerblast shotblaster shall not exceed 0.03 grains per dry standard cubic foot of exhaust air.

#### D.9.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

### Compliance Determination Requirements

#### D.9.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

Within 180 days after the issuance of this permit, the Permittee shall perform PM testing of the Spinnerblast shotblaster, using methods as approved by the Commissioner, in order to demonstrate compliance with condition D.9.1. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

#### D.9.4 Particulate Matter (PM)

The baghouse CE-3 for PM control shall be in operation at all times when the Spinnerblast shotblaster is in operation.

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

#### D.9.5 Visible Emissions Notations

- (a) Daily visible emission notations of the baghouse CE-3 stack exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

#### D.9.6 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse CE-3 used in conjunction with the Spinnerblast shotblaster, at least once daily when the shotblaster is in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 2.0 and 8.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

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

#### D.9.7 Baghouse Inspections

An inspection shall be performed each calendar quarter of all bags controlling the Spinnerblast shotblaster when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors. All defective bags shall be replaced.

#### D.9.8 Broken or Failed Bag Detection

In the event that bag failure has been observed.

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
- (b) For single compartment baghouses, 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).

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

#### D.9.9 Record Keeping Requirements

- (a) To document compliance with Condition D.9.5, the Permittee shall maintain records of daily visible emission notations of the baghouse CE-3 stack exhaust.
- (b) To document compliance with Condition D.9.6, the Permittee shall maintain the following:
  - (1) Daily records of the following operational parameters during normal operation when venting to the atmosphere:

- (A) Inlet and outlet differential static pressure; and
- (B) Cleaning cycle: frequency and differential pressure.
- (2) Documentation of all response steps implemented, per event .
- (3) Operation and Compliance Response logs, including work purchases orders, shall be maintained.
- (4) Quality Assurance/Quality Control (QA/QC) procedures.
- (5) Operator standard operating procedures (SOP).
- (6) Manufacturer's specifications or its equivalent.
- (7) Equipment "troubleshooting" contingency plan.
- (8) Documentation of the dates vents are redirected.
- (c) To document compliance with Condition D.9.7, the Permittee shall maintain records of the results of the inspections required under Condition D.9.7 and the dates the vents are redirected.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

## SECTION D.10

## FACILITY OPERATION CONDITIONS

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

one (1) muller green sand handling system, including two sand storage bins, each with a capacity of 150 tons, identified as unit 5, constructed in August 1976, with a maximum capacity of 60 tons of sand per hour, with emissions controlled by a wet scrubber, identified as CE-1B.

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

#### D.10.1 Nonattainment Area Particulate Limitations [326 IAC 6-1-18]

Pursuant to 326 IAC 6-1-18 (Nonattainment Area Particulate Limitations), the particulate matter (PM) emissions from the muller green sand handling system shall not exceed 0.074 grains per dry standard cubic foot of exhaust air and 19.0 tons per year.

#### D.10.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

### Compliance Determination Requirements

#### D.10.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

Within 24 months after issuance of this permit, the Permittee shall perform PM testing using methods as approved by the Commissioner, in order to demonstrate compliance with condition D.10.1. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

#### D.10.4 Particulate Matter (PM)

The wet scrubber CE-1B for PM control shall be in operation at all times when the muller green sand handling system is in operation.

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

#### D.10.5 Visible Emissions Notations

- (a) Daily visible emission notations of the wet scrubber CE-1B stack exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

#### D.10.6 Scrubber Parametric Monitoring

The Permittee shall monitor and record the pressure drop and flow rate of the scrubber CE-1B, at least once per shift. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across the wet scrubber shall be maintained within the range of 4 to 9.5 inches of water or a range established during the latest stack test. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the flow rates shall be maintained at a minimum of 75 gallons per minute or minimum flow rates established during the latest stack test. The Compliance Response Plan for the scrubber shall contain troubleshooting contingency and response steps for when the pressure drop or flow rate readings are outside of the normal ranges for any one reading.

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

#### D.10.7 Scrubber Inspections

An inspection shall be performed each calendar quarter of the scrubber controlling the muller green sand handling system when venting to the atmosphere. All defective scrubber parts shall be replaced.

#### D.10.8 Scrubber Failure

In the event that scrubber failure has been observed:

- (a) The affected process will be shut down immediately until the failed unit has been replaced.
- (b) Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion.

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

#### D.10.9 Record Keeping Requirements

- (a) To document compliance with Condition D.10.5, the Permittee shall maintain records of daily visible emission notations of the wet scrubber CE-1B stack exhausts.
- (b) To document compliance with Condition D.10.6, the Permittee shall maintain records of the pressure drop readings and flow rate readings of each of the scrubbers.
- (c) To document compliance with Condition D.10.7, the Permittee shall maintain records of the results of the inspections required under Condition D.10.7 and the types and numbers of any parts replaced.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

## SECTION D.11

## FACILITY OPERATION CONDITIONS

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

one (1) oil/shell core sand handling system, including two silos each with a capacity of 25 tons of sand, identified as unit 10A, constructed in 1977, with a maximum capacity of 2.11 tons of sand per hour, with emissions uncontrolled.

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

#### D.11.1 Nonattainment Area Particulate Limitations [326 IAC 6-1-18]

Pursuant to 326 IAC 6-1-18 (Nonattainment Area Particulate Limitations), the particulate matter (PM) emissions from the oil/shell core sand handling system shall not exceed 0.052 grains per dry standard cubic foot of exhaust air and 5.0 tons per year. In order to comply with these emissions limits, the amount of sand throughput to the oil/shell core sand handling system shall be limited to 2803.2 tons per 12 consecutive month period.

#### D.11.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

### Compliance Determination Requirements

#### D.11.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.11.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

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

#### D.11.4 Record Keeping Requirements

- (a) To document compliance with Condition D.11.1, the Permittee shall maintain records of the sand throughput to the oil/shell core sand handling system.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

#### D.11.5 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.11.1 shall be submitted to the addresses listed in Section C - General Reporting Requirements, using the reporting form located at the end of this permit, or its equivalent, within thirty (30) days after the end of the quarter being reported.

## SECTION D.12

## FACILITY OPERATION CONDITIONS

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

one (1) no-bake sand handling system, identified as unit 10, located in the south yard, constructed prior to 1970, with a maximum capacity of 1.25 tons of sand per hour, with emissions uncontrolled, and consisting of the following emission units:

- (a) one (1) pneumatic air driven silo with a maximum capacity of 75 tons of sand; and
- (b) one (1) sand hopper with a maximum capacity of 15 tons of sand.

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

#### D.12.1 Nonattainment Area Particulate Limitations [326 IAC 6-1-18]

Pursuant to 326 IAC 6-1-18 (Nonattainment Area Particulate Limitations), the particulate matter (PM) emissions from the no-bake sand handling system shall not exceed 0.027 grains per dry standard cubic foot of exhaust air and 14.6 tons per year. In order to comply with these emissions limits, the amount of sand throughput to the no-bake sand handling system shall be limited to 8103 tons per 12 consecutive month period.

#### D.12.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

### Compliance Determination Requirements

#### D.12.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.12.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

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

#### D.12.4 Record Keeping Requirements

- (a) To document compliance with Condition D.12.1, the Permittee shall maintain records of the sand throughput to the no-bake sand handling system.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

#### D.12.5 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.12.1 shall be submitted to the addresses listed in Section C - General Reporting Requirements, using the reporting form located at the end of this permit, or its equivalent, within thirty (30) days after the end of the quarter being reported.

## SECTION D.13

## FACILITY OPERATION CONDITIONS

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

one (1) Alphasheet sand handling system, including one silo with a capacity of 50 tons of sand and one (1) storage hopper with a capacity of 10 tons, identified as unit 10B, constructed in 1976, with a maximum capacity of 5.0 tons of sand per hour, with emissions uncontrolled.

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

#### D.13.1 Nonattainment Area Particulate Limitations [326 IAC 6-1-18]

Pursuant to 326 IAC 6-1-18 (Nonattainment Area Particulate Limitations), the particulate matter (PM) emissions from the alphasheet sand handling system shall not exceed 0.021 grains per dry standard cubic foot of exhaust air and 5.6 tons per year. In order to comply with these emissions limits, the amount of sand throughput to the alphasheet sand handling system shall be limited to 3109.8 tons per 12 consecutive month period.

#### D.13.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

### Compliance Determination Requirements

#### D.13.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.13.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

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

#### D.13.4 Record Keeping Requirements

- (a) To document compliance with Condition D.13.1, the Permittee shall maintain records of the sand throughput to the alphasheet sand handling system.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

#### D.13.5 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.13.1 shall be submitted to the addresses listed in Section C - General Reporting Requirements, using the reporting form located at the end of this permit, or its equivalent, within thirty (30) days after the end of the quarter being reported.

## SECTION D.14

## FACILITY OPERATION CONDITIONS

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

one (1) magnesium treatment process for producing ductile iron, identified as unit number 22, constructed in 1977, with a maximum capacity of 6.0 tons of iron per hour, with emissions controlled with the use of the Sigmat process. The Sigmat process is essentially a box enclosure which holds the magnesium. The iron is poured into the box to react with the magnesium and smoke is unable to escape.

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

#### D.14.1 Nonattainment Area Particulate Limitations [326 IAC 6-1-2]

Pursuant to 326 IAC 6-1-2 (Nonattainment Area Particulate Limitations), the particulate matter (PM) emissions from the magnesium treatment process shall not exceed 0.03 grains per dry standard cubic foot of exhaust air.

#### D.14.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

### Compliance Determination Requirements

#### D.14.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.14.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

## SECTION D.15

## FACILITY OPERATION CONDITIONS

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

Insignificant Activities including the following:

- (a) six (6) snag grinders, constructed in 1970, identified as units 2A through 2D, using a 20,535 acfm baghouse identified as CE-5 for emissions control;
- (b) nine (9) portable grinders, constructed in 1960, identified as units 2E through 2K, with emissions uncontrolled; and
- (c) one (1) welding/grinding station, constructed in 1960, identified as unit 2L, with emissions uncontrolled.

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

#### D.15.1 Nonattainment Area Particulate Limitations [326 IAC 6-1-18]

Pursuant to 326 IAC 6-1-18 (Nonattainment Area Particulate Limitations), the particulate matter (PM) emissions from each of the above listed processes shall not exceed 0.023 grains per dry standard cubic foot of exhaust air and 3.0 tons per year.

### Compliance Determination Requirements

#### D.15.2 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test these facilities by this permit. However IDEM may require compliance testing at any specific time when necessary to determine if the facilities are in compliance. If testing is required by IDEM, compliance with the PM limits specified in Condition D.15.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR MANAGEMENT  
COMPLIANCE DATA SECTION  
and  
St. Joseph County Health Department**

**PART 70 OPERATING PERMIT  
CERTIFICATION**

Source Name: South Bend Acquisition Corporation  
Source Address: 220 W. Eckman Street, South Bend, Indiana 46601  
Mailing Address: 220 W. Eckman Street, South Bend, Indiana 46601  
Part 70 Permit No.: T141-6210-00010

**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:

- 9 Annual Compliance Certification Letter
- 9 Test Result (specify) \_\_\_\_\_
- 9 Report (specify) \_\_\_\_\_
- 9 Notification (specify) \_\_\_\_\_
- 9 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:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR MANAGEMENT  
COMPLIANCE DATA SECTION  
P.O. Box 6015  
100 North Senate Avenue  
Indianapolis, Indiana 46206-6015  
Phone: 317-233-5674  
Fax: 317-233-5967**

**and  
St. Joseph County Health Department  
County-City Building, Room 914  
South Bend, Indiana 46601-1870**

**PART 70 OPERATING PERMIT  
EMERGENCY/DEVIATION OCCURRENCE REPORT**

Source Name: South Bend Acquisition Corporation  
Source Address: 220 W. Eckman Street, South Bend, Indiana 46601  
Mailing Address: 220 W. Eckman Street, South Bend, Indiana 46601  
Part 70 Permit No.: T141-6210-00010

**This form consists of 2 pages**

**Page 1 of 2**

Check either No. 1 or No.2

- 9** 1. This is an emergency as defined in 326 IAC 2-7-1(12)  
C The Permittee must notify the Office of Air Management (OAM), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and  
C The Permittee must submit notice in writing or by facsimile within two (2) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16
- 9** 2. This is a deviation, reportable per 326 IAC 2-7-5(3)(c)  
C The Permittee must submit notice in writing within ten (10) calendar days

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/Deviation:

Describe the cause of the Emergency/Deviation:

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

**Page 2 of 2**

Date/Time Emergency/Deviation started:
Date/Time Emergency/Deviation was corrected:
Was the facility being properly operated at the time of the emergency/deviation?    Y    N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO <sub>2</sub> , VOC, NO <sub>x</sub> , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency/deviation:
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 MANAGEMENT  
COMPLIANCE DATA SECTION  
and  
St. Joseph County Health Department**

**Part 70 Quarterly Report**

Source Name: South Bend Acquisition Corporation  
Source Address: 220 W. Eckman Street, South Bend, Indiana 46601  
Mailing Address: 220 W. Eckman Street, South Bend, Indiana 46601  
Part 70 Permit No.: T141-6210-00010  
Facility: Pinlift shakeout system (unit 9A)  
Parameter: metal throughput  
Limit: 39,998 tons per 12 consecutive month period

YEAR: \_\_\_\_\_

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

- 9 No deviation occurred in this quarter.
- 9 Deviation/s occurred in this quarter.  
Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_  
Title / Position: \_\_\_\_\_  
Signature: \_\_\_\_\_  
Date: \_\_\_\_\_  
Phone: \_\_\_\_\_

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR MANAGEMENT  
COMPLIANCE DATA SECTION  
and  
St. Joseph County Health Department**

**Part 70 Quarterly Report**

Source Name: South Bend Acquisition Corporation  
Source Address: 220 W. Eckman Street, South Bend, Indiana 46601  
Mailing Address: 220 W. Eckman Street, South Bend, Indiana 46601  
Part 70 Permit No.: T141-6210-00010  
Facility: oil/shell core sand handling system  
Parameter: sand throughput  
Limit: 2803.2 tons per 12 consecutive month period

YEAR: \_\_\_\_\_

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

- 9 No deviation occurred in this quarter.
- 9 Deviation/s occurred in this quarter.  
Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_  
Title / Position: \_\_\_\_\_  
Signature: \_\_\_\_\_  
Date: \_\_\_\_\_  
Phone: \_\_\_\_\_

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR MANAGEMENT  
COMPLIANCE DATA SECTION  
and  
St. Joseph County Health Department**

**Part 70 Quarterly Report**

Source Name: South Bend Acquisition Corporation  
Source Address: 220 W. Eckman Street, South Bend, Indiana 46601  
Mailing Address: 220 W. Eckman Street, South Bend, Indiana 46601  
Part 70 Permit No.: T141-6210-00010  
Facility: no-bake sand handling system  
Parameter: sand throughput  
Limit: 8103 tons per 12 consecutive month period

YEAR: \_\_\_\_\_

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.

Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_  
Title / Position: \_\_\_\_\_  
Signature: \_\_\_\_\_  
Date: \_\_\_\_\_  
Phone: \_\_\_\_\_

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR MANAGEMENT  
COMPLIANCE DATA SECTION  
and  
St. Joseph County Health Department**

**Part 70 Quarterly Report**

Source Name: South Bend Acquisition Corporation  
Source Address: 220 W. Eckman Street, South Bend, Indiana 46601  
Mailing Address: 220 W. Eckman Street, South Bend, Indiana 46601  
Part 70 Permit No.: T141-6210-00010  
Facility: alphasat sand handling system  
Parameter: sand throughput  
Limit: 3109.8 tons per 12 consecutive month period

YEAR: \_\_\_\_\_

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

- 9 No deviation occurred in this quarter.
- 9 Deviation/s occurred in this quarter.  
Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_  
Title / Position: \_\_\_\_\_  
Signature: \_\_\_\_\_  
Date: \_\_\_\_\_  
Phone: \_\_\_\_\_

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR MANAGEMENT  
COMPLIANCE DATA SECTION  
and  
St. Joseph County Health Department**

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

Source Name: South Bend Acquisition Corporation  
Source Address: 220 W. Eckman Street, South Bend, Indiana 46601  
Mailing Address: 220 W. Eckman Street, South Bend, Indiana 46601  
Part 70 Permit No.: T141-6210-00010

Months: \_\_\_\_\_ to \_\_\_\_\_ Year: \_\_\_\_\_

This report is an affirmation that the source has met all the compliance monitoring requirements stated in this permit. This report shall be submitted quarterly. Any deviation from the compliance monitoring requirements and the date(s) of each deviation must be reported. Additional pages may be attached if necessary. This form can be supplemented by attaching the Emergency/Deviation Occurrence Report. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

**9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD**

**9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD.**

<b>Compliance Monitoring Requirement</b> (e.g. Permit Condition D.1.3)	<b>Number of Deviations</b>	<b>Date of each Deviation</b>

Form Completed By: \_\_\_\_\_  
Title/Position: \_\_\_\_\_  
Date: \_\_\_\_\_  
Phone: \_\_\_\_\_

Attach a signed certification to complete this report.

**Indiana Department of Environmental Management  
Office of Air Management  
and St. Joseph County Environmental Health Department**

Technical Support Document (TSD) for a Part 70 Operating Permit  
and Enhanced New Source Review (ENSR)

**Source Background and Description**

<b>Source Name:</b>	<b>South Bend Acquisition Corporation</b>
<b>Source Location:</b>	<b>220 W. Eckman Street, South Bend, Indiana 46601</b>
<b>County:</b>	<b>St. Joseph</b>
<b>SIC Code:</b>	<b>3321</b>
<b>Operation Permit No.:</b>	<b>T141-6210-00010</b>
<b>Permit Reviewer:</b>	<b>Nisha Sizemore</b>

The Office of Air Management (OAM) has reviewed a Part 70 permit application from South Bend Acquisition Corporation relating to the operation of a gray and ductile iron foundry.

**Source Definition**

This gray iron foundry company consists of two (2) plants:

- (1) Plant 1 is located at 220 W. Eckman Street, South Bend, Indiana 46601; and
- (2) Plant 2 is located at 206 E. Tutt Street, South Bend, Indiana 46601.

In order to consider both plants as one single source, all three of the following criteria must be met:

- (a) The plants must have common ownership/control;
- (b) The plants must have the same SIC code; and
- (c) The plants must be located on contiguous or adjacent properties.

The two plants are located two miles apart and have the same SIC code. Sibley owns both sources but only operates Sibley Machine. They have leased Sibley Foundry to South Bend Acquisition Corporation. The lease gives up almost all control over the foundry. So in this case, common ownership does not necessarily equal common control.

The OAM has determined that these two plants are two separate sources because they are not under common control. The OAM has determined that these two plants are two separate independent sources and two separate permits will be issued. If the lease agreement between the two plants changes significantly or is terminated, the OAM may need to re-evaluate this decision.

### **Permitted Emission Units and Pollution Control Equipment**

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

- (1) one (1) castings cleaning/finishing operation consisting of the following emissions units:
  - (a) one (1) Tumbleblast shotblaster, constructed in November, 1965, identified as unit 3, with a maximum capacity of 2.5 tons of iron castings per hour, using a 8040 acfm baghouse identified as CE-4 as emissions control;
  - (b) one (1) Tableblast shotblaster, constructed in July, 1967, identified as unit 4, with a maximum capacity of 0.75 tons of iron castings per hour, using a 9870 acfm baghouse identified as CE-2 as control;
  - (c) one (1) Spinnerblast shotblaster, constructed in 1979, identified as unit 7, with a maximum capacity of 1.5 tons of iron castings per hour, using a 5600 acfm baghouse identified as CE-3 as control.

### **Unpermitted Emission Units and Pollution Control Equipment Requiring ENSR**

The source also consists of the following unpermitted facilities/units:

- (1) one (1) scrap and charge handling process, constructed in 1977, with a maximum capacity of 6 tons of iron per hour, with emissions uncontrolled;
- (2) one (1) scrap preheater, constructed in 1980, with a maximum heat input capacity of 2.17 million Btu per hour, with emissions uncontrolled;
- (3) one (1) melting process, with a maximum capacity of 6 tons of iron per hour, uncontrolled, consisting of the following emission units:
  - (a) one (1) electric induction furnace, constructed in September 1983, identified as unit 11A, with a maximum capacity of 1.5 tons of metal per hour, with emissions uncontrolled;
  - (b) one (1) electric induction furnace, constructed in September 1983, identified as unit 11B, with a maximum capacity of 1.5 tons of metal per hour, with emissions uncontrolled;
  - (c) one (1) electric induction furnace, constructed in 1980, identified as unit 11C, with a maximum capacity of 3.0 tons of metal per hour, with emissions uncontrolled;
- (4) one (1) pouring/casting process, constructed prior to 1950, with a maximum capacity of 6 tons of iron per hour, with emissions uncontrolled;
- (5) one (1) castings cooling process, constructed prior to 1950, with a maximum capacity of 6 tons of iron per hour, with emissions uncontrolled;

- (6) one (1) shakeout system, constructed in 1977, identified as unit 6A, utilized for servicing the Herman and Slinger mold lines, with a maximum capacity of 6 tons of iron per hour and 30 tons of sand per hour, controlled by the north cyclone and a wet scrubber identified as CE-1A;
- (7) one (1) shakeout system, constructed in 1983, identified as unit 9A, utilized for servicing the Pinlift mold line, with a maximum capacity of 5 tons of iron per hour and 16 tons of sand per hour, with emissions uncontrolled;
- (8) one (1) coremaking process, with a maximum capacity of 6 tons of iron per hour, uncontrolled, consisting of the following emission units;
  - (a) four (4) Shalco natural gas-fired shell core machines, constructed in 1966, identified as emission units 13A through 13D, each with a maximum heat input capacity of 0.4 million British thermal units per hour, each with a maximum capacity of 250 pounds of sand per hour and 6.25 pounds of resin per hour;
  - (b) two (2) natural gas-fired Beardsley and Piper corematics, constructed in 1974, identified as emission units 13E and 13F, each with a maximum heat input capacity of 0.5 million British thermal units per hour, each with a maximum capacity of 125 pounds of sand per hour and 3.125 pounds of resin per hour;
  - (c) one (1) natural gas-fired Beardsley and Piper Petibone, constructed in 1974, identified as unit 13G, with a maximum heat input capacity of 0.2 million British thermal units per hour, with a maximum capacity of 150 pounds of sand per hour and 3.75 pounds of resin per hour;
  - (d) one (1) natural gas-fired Howard water based core wash drying oven, constructed in 1987, identified as unit 15A, with a maximum heat input capacity of 0.2 million British thermal units per hour, with emissions exhausting through stack S3;
  - (e) one (1) natural gas-fired Feco-A-Bangor Punta water based core wash drying oven, constructed in 1987, identified as unit 15B, with a maximum heat input capacity of 0.2 million British thermal units per hour, with emissions exhausting through stack S2;
  - (f) one (1) natural gas-fired Dry-Sys Equipment core curing oven, constructed in 1956, identified as unit 15C, with a maximum heat input capacity of 0.2 million British thermal units per hour, with emissions uncontrolled and exhausting through stack S1;
  - (g) one (1) oil sand core making process, identified as unit 17, constructed prior to 1970, with a maximum capacity of 110 pounds of sand per hour and 3.52 pounds of binder per hour;
  - (h) one (1) no-bake core making process, identified as unit 20, constructed in 1976, with a maximum capacity of 1.25 tons of sand per hour and 0.015 tons of resin per hour;
- (9) one (1) muller green sand handling system, identified as unit 5, constructed in August 1976, with a maximum capacity of 60 tons of sand per hour, with emissions controlled by a wet scrubber, identified as CE-1B;

- (10) one (1) oil/shell core sand handling system, including two silos each with a capacity of 25 tons of sand, identified as unit 10A, constructed in 1977, with a maximum capacity of 2.11 tons of sand per hour, with emissions uncontrolled;
- (11) one (1) no-bake sand handling system, including one silo with a capacity of 75 tons of sand, identified as unit 10B, constructed in 1976, with a maximum capacity of 1.25 tons of sand per hour, with emissions uncontrolled;
- (12) one (1) Alphasert sand handling system, identified as unit 10, located in the south yard, constructed prior to 1970, with a maximum capacity of 5 tons of sand per hour, with emissions uncontrolled, and consisting of the following emission units:
  - (a) one (1) pneumatic air driven silo with a maximum capacity of 50 tons of sand;
  - (b) one (1) sand hopper with a maximum capacity of 15 tons of sand;
  - (c) two (2) sand hoppers, each with a maximum capacity of 25 tons of sand; and
  - (d) two (2) sand hoppers, each with a maximum capacity of 250 tons of sand.
- (13) one (1) Slinger mold making operation, identified as unit number 8, constructed in 1987, with a maximum capacity of 5 molds per hour, 5 tons of iron per hour, 20 tons of sand per hour, 640 pounds of customix per hour, and 12.8 pounds of alphasert per hour;
- (14) one (1) Herman mold making operation, constructed in 1977, with a maximum capacity of 15 molds per hour, 13.5 tons of iron per hour, 30 tons of sand per hour, and 960 pounds of customix per hour;
- (15) one (1) Pin-Lift mold making operation, constructed in 1970, with a maximum capacity of 35 molds per hour, 5 tons of iron per hour, 16 tons of sand per hour, and 512 pounds of customix per hour; and
- (16) one (1) magnesium treatment process for producing ductile iron, identified as unit number 22, constructed in 1977, with a maximum capacity of 6.0 tons of iron per hour, with emissions uncontrolled.

### **New Emission Units and Pollution Control Equipment Requiring ENSR**

There are no new facilities to be reviewed under the ENSR process.

### **Insignificant Activities**

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

- (1) natural gas-fired combustion sources with heat input equal to or less than ten (10) million British thermal units per hour:
  - (a) two (2) air make-up units, referred to as 16A and 16B, constructed in 1976, each with a maximum heat input capacity of 5 million British thermal units per hour.
- (2) replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment;

- (3) four (4) snag grinders, constructed in 1970, identified as units 2A through 2D, using a 20,535 acfm baghouse identified as CE-5 for emissions control;
- (4) seven (7) portable grinders, constructed in 1960, identified as units 2E through 2K, using the same 20,535 acfm baghouse identified as CE-5 for emissions control;
- (5) one (1) welding/grinding station, constructed in 1960, identified as unit 2L, using the same 20,535 acfm baghouse identified as CE-5 for emissions control;
- (6) paved and unpaved roads and parking lots with public access; and
- (7) a laboratory as defined in 326 IAC 2-7-1(21)(D).

### Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

- (1) registration S 11 1, issued on April 20, 1994, for the grinding system baghouse;
- (2) registration S 11 2, issued on April 20, 1994, for the tumblast baghouse;
- (3) registration S 11 3, issued on April 20, 1994, for the table blast baghouse; and
- (4) registration S 11 10, issued on April 20, 1994, for the spinner blast baghouse.

### Enforcement Issue

- (a) 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 *Unpermitted Emission Units and Pollution Control Equipment Requiring ENSR*.
- (b) IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

### Recommendation

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

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

An administratively complete Part 70 permit application for the purposes of this review was received on July 1, 1996. Additional information was received on December 8, 1997, May 6, 1998, September 11, 1998, September 22, 1998, and September 24, 1998.

A notice of completeness letter was mailed to the source on December 22, 1997.

### Emission Calculations

See Appendix A of this document for detailed emissions calculations.

**Potential Emissions**

Pursuant to 326 IAC 1-2-55, Potential Emissions are defined as “emissions of any one (1) pollutant which would be emitted from a facility, if that facility were operated without the use of pollution control equipment unless such control equipment is necessary for the facility to produce its normal product or is integral to the normal operation of the facility.”

Pollutant	Potential Emissions (tons/year)
PM	1785
PM-10	440
SO <sub>2</sub>	0.53
VOC	65.2
CO	1.00
NO <sub>x</sub>	26.5

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential Emissions (tons/year)
lead	less than 10
acrolein	less than 10
benzene	less than 10
formaldehyde	less than 10
xylene	less than 10
Naphthalene	less than 10
phenol	less than 10
toluene	less than 10
<b>TOTAL</b>	less than 25

- (a) The potential emissions (as defined in 326 IAC 1-2-55) of PM10 are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

**Actual Emissions**

The following table shows the actual emissions from the source. This information reflects the 1997 OAM emission data.

Pollutant	Actual Emissions (tons/year)
PM	7.68
PM-10	5.66
SO <sub>2</sub>	0.07
VOC	0.13
CO	0.19
NO <sub>x</sub>	1.52
HAP (lead)	0.21

**Limited Potential to Emit**

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units.

Process/facility	Limited Potential to Emit (tons/year)						
	PM	PM-10	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	HAPs
scrap and charge handling including preheater	15.77	9.46	0.00	0.00	0.00	0.00	0.00
furnaces	23.65	22.60	0.00	0.00	0.00	0.00	1.20
pouring/casting	110.38	54.14	0.53	0.00	0.00	0.26	0.00
cooling	36.79	36.79	0.00	0.00	0.00	0.00	0.00
Herman shakeout system 6A	1.68	1.18	0.00	31.54	0.00	0.00	0.00
Pinlift shakeout system 9A	64.0	44.8	0.00	24.0	0.00	0.00	0.00
core making	0.00	0.00	0.00	6.41	0.00	13.14	3.53
mold making	0.00	0.00	0.00	0.94	0.00	13.14	0.69
muller sand handling system	19.0	19.0	0.00	0.00	0.00	0.00	0.00
oil/shell core sand handling	5.0	5.0	0.00	0.00	0.00	0.00	0.00
no-bake sand handling	14.6	14.6	0.00	0.00	0.00	0.00	0.00
Airset cores sand handling system	5.6	5.6	0.00	0.00	0.00	0.00	0.00
Tumbleblast shotblaster	5.0	5.0	0.00	0.00	0.00	0.00	0.00
Tableblast shotblaster	4.3	4.3	0.00	0.00	0.00	0.00	0.00
Spinnerblast shotblaster	2.23	0.22	0.00	0.00	0.00	0.00	0.00
magnesium treatment	12.61	12.61	0.00	0.00	0.00	0.00	0.00
<b>Total Emissions</b>	<b>320.61</b>	<b>225.3</b>	<b>2.53</b>	<b>62.89</b>	<b>0.00</b>	<b>26.54</b>	<b>5.42</b>

### County Attainment Status

The source is located in St. Joseph County.

Pollutant	Status
PM-10	attainment
SO <sub>2</sub>	attainment
Ozone	maintenance
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO<sub>x</sub>) are precursors for the formation of ozone. Therefore, VOC and NO<sub>x</sub> emissions are considered when evaluating the rule applicability relating to the ozone standards. St. Joseph County has been designated as maintenance attainment for ozone.
- (b) St. Joseph County has been classified as attainment or unclassifiable for PM10, CO, SO<sub>2</sub>, and lead.

### Federal Rule Applicability

- (a) There are no New Source Performance Standards (326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) 40 CFR Part 63 applicable to this source.

### State Rule Applicability - Entire Source

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

This existing source is a major stationary source because it is one of the 28 listed source categories and at least one attainment regulated pollutant is emitted at a rate of 100 tons per year. This source has never been reviewed pursuant to the requirements of 326 IAC 2-2 (PSD).

#### 326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it is located in St. Joseph County and has the potential to emit more than ten (10) tons per year of VOC. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by April 15 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

#### 326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Visible Emissions Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), visible emissions shall meet the following, unless otherwise stated in this permit:

- (a) Visible emissions shall not exceed an average of thirty percent (30%) opacity in twenty-four (24) consecutive readings as determined by 326 IAC 5-1-4,
- (b) Visible emissions shall not exceed sixty percent (60%) opacity for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) in a six (6) hour period.

**State Rule Applicability - Scrap and charge handling process, constructed in 1977; and the scrap preheater, constructed in 1980**

326 IAC 6-1-2 (Nonattainment Area Particulate Limitations)

Pursuant to 326 IAC 6-1-2(a), particulate matter (PM) emissions from the scrap and charge handling process shall be limited to 0.03 grains per dry standard cubic foot of exhaust. Also pursuant to 326 IAC 6-1-2(a), the particulate matter (PM) emissions from the scrap preheater shall be limited to 0.03 grains per dry standard cubic foot of exhaust.

**State Rule Applicability - electric induction furnace 11A, constructed in 1983; electric induction furnace 11B, constructed in 1983; and electric induction furnace 11C, constructed in 1980**

326 IAC 6-1-2 (Nonattainment Area Particulate Limitations)

Pursuant to 326 IAC 6-1-2(e), particulate matter (PM) emissions from each of the electric induction furnaces shall be limited to 0.07 grains per dry standard cubic foot of exhaust.

**State Rule Applicability - Pouring/casting process, constructed prior to 1950**

326 IAC 6-1-2 (Nonattainment Area Particulate Limitations)

Pursuant to 326 IAC 6-1-2(a), particulate matter (PM) emissions from the pouring/casting process shall be limited to 0.03 grains per dry standard cubic foot of exhaust.

326 IAC 8-1-6 (Best Available Control Technology (BACT))

The pouring/casting process was constructed prior to the applicability date of January 1, 1980. Therefore, the requirements of 326 IAC 8-1-6 (BACT) do not apply. No other 326 IAC 8 rules apply.

**State Rule Applicability - Castings cooling process, constructed prior to 1950**

326 IAC 6-1-2 (Nonattainment Area Particulate Limitations)

Pursuant to 326 IAC 6-1-2(a), particulate matter (PM) emissions from the castings cooling process shall be limited to 0.03 grains per dry standard cubic foot of exhaust.

326 IAC 8-1-6 (Best Available Control Technology (BACT))

The castings cooling process was constructed prior to the applicability date of January 1, 1980. Therefore, the requirements of 326 IAC 8-1-6 (BACT) do not apply. No other 326 IAC 8 rules apply.

**State Rule Applicability - Herman and Slinger shakeout system (unit 6A), constructed in 1977;**

326 IAC 6-1-2 (Nonattainment Area Particulate Limitations)

Pursuant to 326 IAC 6-1-2(a), particulate matter (PM) emissions from the Herman and Slinger shakeout system designated as unit 6A shall be limited to 0.03 grains per dry standard cubic foot of exhaust. The wet scrubber identified as CE-1A shall be in operation at all times that the Herman and Slinger shakeout system designated as unit 6A is in operation in order to comply with this limit.

326 IAC 8-1-6 (Best Available Control Technology (BACT))

The Herman and Slinger shakeout system was constructed prior to the applicability date of January 1, 1980. Therefore, the requirements of 326 IAC 8-1-6 (BACT) do not apply. No other 326 IAC 8 rules apply.

**State Rule Applicability - Pinlift shakeout system (unit 9A), constructed in 1983**

326 IAC 6-1-2 (Nonattainment Area Particulate Limitations)

Pursuant to 326 IAC 6-1-2(a), particulate matter (PM) emissions from the Pin-lift shakeout system designated as unit 9A shall be limited to 0.03 grains per dry standard cubic foot of exhaust.

326 IAC 8-1-6 (Best Available Control Technology (BACT))

The Pinlift shakeout system has potential emissions greater than 25 tons per year, and was constructed after to the applicability date of January 1, 1980; therefore the requirements of 326 IAC 8-1-6 (BACT) are applicable.

In order to render the requirements of 326 IAC 8-1-6 (BACT) not applicable, the amount of metal throughput to the Pinlift shakeout system shall be limited to 39,998 tons per 12 consecutive month period. This production limit is equivalent to VOC emissions of 24 tons per year. Therefore, the requirements of 326 IAC 8-1-6 (BACT) do not apply. No other 326 IAC 8 rules apply.

**State Rule Applicability - Tumbleblast shotblaster, constructed in 1965**

326 IAC 6-1-18 (Nonattainment Area Particulate Limitations)

Pursuant to 326 IAC 6-1-18, particulate matter (PM) emissions from the Tumbleblast shotblaster shall be limited to 0.030 grains per dry standard cubic foot of exhaust and 5.0 tons per year. The baghouse identified as CE-4 shall be in operation at all times that the Tumbleblast shotblaster is in operation in order to comply with this limit.

**State Rule Applicability - Tableblast shotblaster, constructed in 1967**

326 IAC 6-1-18 (Nonattainment Area Particulate Limitations)

Pursuant to 326 IAC 6-1-18, particulate matter (PM) emissions from the Tableblast shotblaster shall be limited to 0.037 grains per dry standard cubic foot of exhaust and 4.3 tons per year. The baghouse identified as CE-2 shall be in operation at all times that the Tableblast shotblaster is in operation in order to comply with this limit.

**State Rule Applicability - Spinnerblast shotblaster, constructed in 1965**

326 IAC 6-1-2 (Nonattainment Area Particulate Limitations)

Pursuant to 326 IAC 6-1-2, particulate matter (PM) emissions from the Spinnerblast shotblaster shall be limited to 0.03 grains per dry standard cubic foot of exhaust. The baghouse identified as CE-3 shall be in operation at all times that the Spinnerblast shotblaster is in operation in order to comply with this limit.

**State Rule Applicability - Four (4) Shalco shell core machines, constructed in 1966**

326 IAC 8-1-6 (Best Available Control Technology (BACT))

The shell core machines were constructed prior to the applicability date of January 1, 1980. Therefore, the requirements of 326 IAC 8-1-6 (BACT) do not apply. No other 326 IAC 8 rules apply.

**State Rule Applicability - Two (2) Beardsley and Piper corematics, constructed in 1974**

326 IAC 8-1-6 (Best Available Control Technology (BACT))

The corematics were constructed prior to the applicability date of January 1, 1980. Therefore, the requirements of 326 IAC 8-1-6 (BACT) do not apply. No other 326 IAC 8 rules apply.

**State Rule Applicability - One (1) Beardsley and Piper petibone, constructed in 1974**

326 IAC 8-1-6 (Best Available Control Technology (BACT))

The petibone was constructed prior to the applicability date of January 1, 1980. Therefore, the requirements of 326 IAC 8-1-6 (BACT) do not apply. No other 326 IAC 8 rules apply.

**State Rule Applicability - Howard water based core wash drying oven, constructed in 1987**

There are no applicable requirements for this emission unit.

**State Rule Applicability - Feco-A-Bangor Punta water based core wash drying oven, constructed in 1987**

There are no applicable requirements for this emission unit.

**State Rule Applicability - Dry-Sys Equipment core curing oven, constructed in 1956**

326 IAC 8-1-6 (Best Available Control Technology (BACT))

The core curing oven was constructed prior to the applicability date of January 1, 1980. Therefore, the requirements of 326 IAC 8-1-6 (BACT) do not apply. No other 326 IAC 8 rules apply.

**State Rule Applicability - oil sand core making process, constructed in 1976**

326 IAC 8-1-6 (Best Available Control Technology (BACT))

The oil sand core making process was constructed prior to the applicability date of January 1, 1980. Therefore, the requirements of 326 IAC 8-1-6 (BACT) do not apply. No other 326 IAC 8 rules apply.

**State Rule Applicability - no-bake core making process, constructed in 1976**

326 IAC 8-1-6 (Best Available Control Technology (BACT))

The no-bake core making process was constructed prior to the applicability date of January 1, 1980. Therefore, the requirements of 326 IAC 8-1-6 (BACT) do not apply. No other 326 IAC 8 rules apply.

**State Rule Applicability - muller green sand handling system, constructed in 1976**

326 IAC 6-1-18 (Nonattainment Area Particulate Limitations)

Pursuant to 326 IAC 6-1-18, particulate matter (PM) emissions from the muller green sand handling system shall be limited to 0.074 grains per dry standard cubic foot of exhaust and 19.0 tons per year. The wet scrubber identified as CE-1B shall be in operation at all times that the muller green sand handling system is in operation in order to comply with this limit.

**State Rule Applicability - oil/shell core sand handling system, constructed in 1977**

326 IAC 6-1-18 (Nonattainment Area Particulate Limitations)

Pursuant to 326 IAC 6-1-18, particulate matter (PM) emissions from the oil/shell core sand handling system shall be limited to 0.052 grains per dry standard cubic foot of exhaust and 5.0 tons per year. In order to comply with this limit, the amount of sand throughput to the oil/shell core sand handling system shall not exceed 2803.2 tons per 12 consecutive month period.

**State Rule Applicability - no-bake sand handling system, constructed in 1976**

326 IAC 6-1-18 (Nonattainment Area Particulate Limitations)

Pursuant to 326 IAC 6-1-18, particulate matter (PM) emissions from the no-bake sand handling system shall be limited to 0.027 grains per dry standard cubic foot of exhaust and 14.6 tons per year. In order to comply with this limit, the amount of sand throughput to the no-bake sand handling system shall not exceed 8103 tons per 12 consecutive month period.

**State Rule Applicability - Alphaset sand handling system, constructed in 1970**

326 IAC 6-1-18 (Nonattainment Area Particulate Limitations)

Pursuant to 326 IAC 6-1-18, particulate matter (PM) emissions from the Alphaset sand handling system shall be limited to 0.021 grains per dry standard cubic foot of exhaust and 5.6 tons per year. In order to comply with this limit, the amount of sand throughput to the Alphaset sand handling system shall not exceed 3109.8 tons per 12 consecutive month period.

**State Rule Applicability - Slinger mold making process, constructed in 1987**

326 IAC 8-1-6 (Best Available Control Technology (BACT))

The potential to emit VOC from the Slinger mold making process is less than 25 tons per year. Therefore, the requirements of 326 IAC 8-1-6 (BACT) do not apply. No other 326 IAC 8 rules apply.

**State Rule Applicability - Herman mold making process, constructed in 1977**

326 IAC 8-1-6 (Best Available Control Technology (BACT))

The Herman mold making process was constructed prior to the applicability date of January 1, 1980. Therefore, the requirements of 326 IAC 8-1-6 (BACT) do not apply. No other 326 IAC 8 rules apply.

**State Rule Applicability - Pin-lift mold making process, constructed in 1970**

326 IAC 8-1-6 (Best Available Control Technology (BACT))

The Pin-lift mold making process was constructed prior to the applicability date of January 1, 1980. Therefore, the requirements of 326 IAC 8-1-6 (BACT) do not apply. No other 326 IAC 8 rules apply.

**State Rule Applicability - magnesium treatment process, constructed in 1977**

326 IAC 6-1-2 (Nonattainment Area Particulate Limitations)

Pursuant to 326 IAC 6-1-2(a), particulate matter (PM) emissions from the magnesium treatment process shall be limited to 0.03 grains per dry standard cubic foot of exhaust.

**State Rule Applicability - Insignificant activities including the following:**

**four (4) snag grinders, constructed in 1970, identified as units 2A through 2D, using a 20,535 acfm baghouse identified as CE-5 for emissions control;**

**seven (7) portable grinders, constructed in 1960, identified as units 2E through 2K, using the same 20,535 acfm baghouse identified as CE-5 for emissions control; and**

**one (1) welding/grinding station, constructed in 1960, identified as unit 2L, using the same 20,535 acfm baghouse identified as CE-5 for emissions control.**

**326 IAC 6-1-18 (Nonattainment Area Particulate Limitations)**

Pursuant to 326 IAC 6-1-18, particulate matter (PM) emissions from each of the above listed processes shall be limited to 0.023 grains per dry standard cubic foot of exhaust and 3.0 tons per year.

**Compliance Requirements**

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

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

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

**Compliance Monitoring - Herman and Slinger shakeout system (unit 6A), controlled by wet scrubber CE-1A**

1. The wet scrubber CE-1A, controlling the Herman and Slinger shakeout system (unit 6A) has applicable compliance monitoring conditions as specified below:

- (a) Daily visible emissions notations of the Herman and Slinger shakeout system stack exhaust shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.
- (b) The Permittee shall record the total static pressure drop and flow rate of the wet scrubber controlling the shakeout system, at least once daily when the shakeout system is in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across the wet scrubber shall be maintained within the range of 1.0 to 9.5 inches of water or a range established during the latest stack test. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the flow rate the wet scrubber shall be maintained at a minimum of 75 gallons per minute or a minimum flow rate established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the flow rate or pressure reading is outside of the above mentioned ranges for any one reading.
- (c) The instruments used for determining the pressure drop and flow rate shall be subject to approval by IDEM, OAM, and shall be calibrated at least once every six (6) months.
- (d) The gauge employed to take the pressure drop across the scrubber or any part of the facility shall have a scale such that the expected normal reading shall be no less than 20 percent of full scale and be accurate within  $\pm 2\%$  of full scale reading. The instrument shall be quality assured and maintained as specified by the vendor.
- (e) An inspection shall be performed each calendar quarter of the scrubber. Defective scrubber part(s) shall be replaced. A record shall be kept of the results of the inspection and the number of scrubber part(s) replaced.
- (f) In the event that a scrubber's failure has been observed:
  - (1) The affected process will be shut down immediately until the failed unit has been replaced.
  - (2) Based upon the findings of the inspection, any additional corrective actions will be devised within eight (8) hours of discovery and will include a timetable for completion.
- (g) Within 180 days after issuance of this permit, stack tests shall be performed on the wet scrubber controlling the shakeout system for PM emissions in order to show compliance with the limits pursuant to 326 IAC 6-1-2. These tests shall be repeated at least once every five years.

These monitoring conditions are necessary because the scrubber must operate properly to ensure compliance with 326 IAC 5-1 (Opacity) and 326 IAC 6-1-2.

**Compliance Monitoring - Tumbleblast shotblaster, controlled by baghouse CE-4**

2. The baghouse CE-4, controlling the Tumbleblast shotblaster has applicable compliance monitoring conditions as specified below:
  - (a) Daily visible emissions notations of the baghouse CE-4 stack exhaust shall be performed during normal daylight operations when the Tumbleblast shotblaster is in operation. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.
  - (b) The Permittee shall maintain records of the daily visible emission notations of the baghouse CE-4 stack exhaust.
  - (c) The Permittee shall record the total static pressure drop across the baghouse CE-4 used in conjunction with the Tumbleblast shotblaster, at least once daily when the Tumbleblast shotblaster is in operation. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse CE-4 shall be maintained within the range of 5.0 and 8.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.
  - (d) An inspection shall be performed each calendar quarter of all bags controlling the Tumbleblast shotblaster when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.
  - (e) In the event that bag failure has been observed:
    - (1) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced.
    - (2) Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion.
  - (f) The Permittee shall maintain records of the results of the baghouse inspections.

- (g) Within 180 days after issuance of this permit, stack tests shall be performed on the baghouse controlling the Tumbleblast shotblaster for PM emissions in order to show compliance with the limits pursuant to 326 IAC 6-1-18. These tests shall be repeated at least once every five years.

These monitoring conditions are necessary because the baghouse controlling the Tumbleblast shotblaster must operate properly to ensure that the process complies with 326 IAC 6-1-18.

**Compliance Monitoring - Tableblast shotblaster, controlled by baghouse CE-2**

- 3. The baghouse CE-4, controlling the Tableblast shotblaster has applicable compliance monitoring conditions as specified below:
  - (a) Daily visible emissions notations of the baghouse CE-2 stack exhaust shall be performed during normal daylight operations when the Tableblast shotblaster is in operation. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.
  - (b) The Permittee shall maintain records of the daily visible emission notations of the baghouse CE-2 stack exhaust.
  - (c) The Permittee shall record the total static pressure drop across the baghouse CE-2 used in conjunction with the Tableblast shotblaster, at least once daily when the Tableblast shotblaster is in operation. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse CE-2 shall be maintained within the range of 5.0 and 8.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.
  - (d) An inspection shall be performed each calendar quarter of all bags controlling the Tableblast shotblaster when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.
  - (e) In the event that bag failure has been observed:
    - (1) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced.

- (2) Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion.
- (f) The Permittee shall maintain records of the results of the baghouse inspections.
- (g) Within 180 days after issuance of this permit, stack tests shall be performed on the baghouse controlling the Tableblast shotblaster for PM emissions in order to show compliance with the limits pursuant to 326 IAC 6-1-18. These tests shall be repeated at least once every five years.

These monitoring conditions are necessary because the baghouse controlling the Tableblast shotblaster must operate properly to ensure that the process complies with 326 IAC 6-1-18.

**Compliance Monitoring - Spinnerblast shotblaster, controlled by baghouse CE-3**

- 4. The baghouse CE-3, controlling the Spinnerblast shotblaster has applicable compliance monitoring conditions as specified below:
  - (a) Daily visible emissions notations of the baghouse CE-3 stack exhaust shall be performed during normal daylight operations when the Spinnerblast shotblaster is in operation. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.
  - (b) The Permittee shall maintain records of the daily visible emission notations of the baghouse CE-3 stack exhaust.
  - (c) The Permittee shall record the total static pressure drop across the baghouse CE-3 used in conjunction with the Spinnerblast shotblaster, at least once daily when the Spinnerblast shotblaster is in operation. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse CE-3 shall be maintained within the range of 5.0 and 8.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.
  - (d) An inspection shall be performed each calendar quarter of all bags controlling the Spinnerblast shotblaster when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

- (e) In the event that bag failure has been observed:
  - (1) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced.
  - (2) Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion.
- (f) The Permittee shall maintain records of the results of the baghouse inspections.
- (g) Within 180 days after issuance of this permit, stack tests shall be performed on the baghouse controlling the Spinnerblast shotblaster for PM emissions in order to show compliance with the limits pursuant to 326 IAC 6-1-2. These tests shall be repeated at least once every five years.

These monitoring conditions are necessary because the baghouse controlling the Spinnerblast shotblaster must operate properly to ensure that the process complies with 326 IAC 6-1-2.

**Compliance Monitoring - Muller green sand handling system, controlled by wet scrubber CE-1B**

- 5. The wet scrubber CE-1B, controlling the muller green sand handling system has applicable compliance monitoring conditions as specified below:
  - (a) Daily visible emissions notations of the muller green sand handling system stack exhaust shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.
  - (b) The Permittee shall record the total static pressure drop and flow rate of the wet scrubber controlling the muller green sand handling system, at least once daily when the muller green sand handling system is in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across the wet scrubber shall be maintained within the range of 1.0 to 9.5 inches of water or a range established during the latest stack test. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the flow rate the wet scrubber shall be maintained at a minimum of 75 gallons per minute or a minimum flow rate established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the flow rate or pressure reading is outside of the above mentioned ranges for any one reading.

- (c) The instruments used for determining the pressure drop and flow rate shall be subject to approval by IDEM, OAM, and shall be calibrated at least once every six (6) months.
- (d) The gauge employed to take the pressure drop across the scrubber or any part of the facility shall have a scale such that the expected normal reading shall be no less than 20 percent of full scale and be accurate within  $\pm 2\%$  of full scale reading. The instrument shall be quality assured and maintained as specified by the vendor.
- (e) An inspection shall be performed each calendar quarter of the scrubber. Defective scrubber part(s) shall be replaced. A record shall be kept of the results of the inspection and the number of scrubber part(s) replaced.
- (f) In the event that a scrubber's failure has been observed:
  - (1) The affected process will be shut down immediately until the failed unit has been replaced.
  - (2) Based upon the findings of the inspection, any additional corrective actions will be devised within eight (8) hours of discovery and will include a timetable for completion.
- (g) Within 180 days after issuance of this permit, stack tests shall be performed on the wet scrubber CE-1B controlling the muller green sand handling system for PM emissions in order to show compliance with the limits pursuant to 326 IAC 6-1-18. These tests shall be repeated at least once every five years.

These monitoring conditions are necessary because the scrubber must operate properly to ensure compliance with 326 IAC 5-1 (Opacity) and 326 IAC 6-1-18.

**Compliance Monitoring - Pinlift shakeout system (unit 9A), uncontrolled**

- 6. The Pinlift shakeout system (unit 9A) has applicable compliance monitoring conditions as specified below:
  - (a) Daily visible emissions notations of the Pinlift shakeout system stack exhaust shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.
  - (b) Within 180 days after issuance of this permit, stack tests shall be performed on the shakeout system for PM emissions in order to show compliance with the limits pursuant to 326 IAC 6-1-2. These tests shall be repeated at least once every five years.
  - (c) Records shall be kept of the metal throughput to the Pinlift shakeout process on a monthly basis. A quarterly report shall be submitted including this information using the form including with this permit.

These monitoring conditions are necessary to ensure compliance with 326 IAC 5-1 (Opacity) and 326 IAC 6-1-2.

**Compliance Monitoring - oil/shell core sand handling system, no-bake sand handling system, and the alphaset sand handling system (all uncontrolled)**

7. The oil/shell core sand handling system, the no-bake sand handling system, and the alphaset sand handling system have applicable compliance monitoring conditions as specified below:
  - (a) Records shall be kept of the sand throughput to each of the sand handling systems on a monthly basis. A quarterly report shall be submitted including this information using the form including with this permit.

**Air Toxic Emissions**

Indiana presently requests applicants to provide information on emissions of the 187 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Part 70 Application Form GSD-08.

This source will emit levels of air toxics less than those which constitute a major source according to Section 112 of the 1990 Clean Air Act Amendments.

**Conclusion**

The operation of this gray and ductile iron foundry shall be subject to the conditions of the attached proposed Part 70 Permit No. T141-6210-00010.

# Indiana Department of Environmental Management Office of Air Management

## Addendum to the Technical Support Document for Part 70 Operating Permit

<b>Source Name:</b>	<b>South Bend Acquisition Corporation</b>
<b>Source Location:</b>	<b>220 W. Eckman Street, South Bend, Indiana 46601</b>
<b>County:</b>	<b>St. Joseph</b>
<b>SIC Code:</b>	<b>3321</b>
<b>Operation Permit No.:</b>	<b>T141-6210-00010</b>
<b>Permit Reviewer:</b>	<b>Nisha Sizemore</b>

On October 22, 1998, the Office of Air Management (OAM) had a notice published in the South Bend Tribune, South Bend, Indiana, stating that South Bend Acquisition Corporation had applied for a Part 70 Operating Permit to operate a gray and ductile iron foundry. The notice also stated that OAM proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On November 23, 1998, Doug Roark of South Bend Acquisition Corporation submitted comments on the proposed permit. A summary of the comments is as follows:

### **Comment #1**

Change the source address on page 1 to 220 West Eckman Street.

### **Response #1**

The requested change has been made.

### **Comment #2**

Change the responsible official to Jeffrey R. Hipple, Vice President. Change the mailing address to be the same as the source address.

### **Response #2**

These changes have been made.

### **Comment #3**

- (a) The Tumbleblast shotblaster has a capacity of 12.5 tons per hour, not 2.5 tons per hour.
- (b) The Tumbleblast shotblaster is controlled by a 6300 acfm baghouse, not a 8040 acfm baghouse.
- (c) The Tableblast shotblaster has a capacity of 3.0 tons per hour, not 0.75 tons per hour.
- (d) The Tableblast shotblaster is controlled by a 4500 acfm baghouse, not a 9870 acfm baghouse.
- (e) The Spinnerblast shotblaster is controlled by a 4500 acfm baghouse, not a 5600 acfm baghouse.
- (f) Regarding A.2(10) after "muller green sand handling system" add "including two sand storage bins each with a capacity of 150 tons."

- (g) Regarding A.2(12) change “no bake” to “Alphaset,” change “75 tons” to “50 tons,” change “1.25 tons” to “5 tons.” After “including one silo with a capacity of 50 tons” add “and one storage hopper with a capacity of 10 tons.”
- (h) Regarding A.2(13) change “Alphaset,” to “no bake” change “50 tons” to “75 tons,” change “5 tons” to “1.25 tons.”
- (i) Regarding A.2(13), delete parts (c) and (d).
- (j) Regarding A.2(14), after “Slinger mold making operation” add “including two sand storage bins, each with a capacity of 10 tons.” Change the capacity to a maximum of 20 molds per hour and 10 tons or iron per hour.
- (k) Regarding A.2(17), emissions are controlled by the Sigmat process. This process can be up to 90 percent efficient at controlling emissions. This process is an inoculation box where iron pours into the box which contains the magnesium and smoke does not escape. It is basically an total enclosure of the magnesium treatment process.
- (l) Regarding A.3(1), change to six (6) snag grinders, instead of four.
- (m) Regarding A.3(2), change to nine (9) portable grinders instead of seven. Also, these units should be described as having no controls.
- (n) Regarding A.3(2), these units should be described as having no controls.
- (o) Please also make the above listed changes in the TSD.

### **Response #3**

The descriptions for all of these units have been changed in Sections A.2, A.3, and the appropriate Section D of the permit. In cases where capacities have increased, the OAM has revised the potential emissions calculations (see Appendix A). In all cases, emission limitations remain the same as stated in the draft permit.

The final permit reflects the correct descriptions of these units. However, no changes are made to the TSD after the public comment period. The TSD remains the same in order to keep documentation of how the draft permit was produced. This addendum explains any necessary changes to the permit after the comment period. There is no need to make any changes to the TSD at this point.

### **Comment #4**

Regarding Condition D.1.1 of the permit, it is unclear how compliance can be shown because the scrap and charge handling emissions are fugitive.

### **Response #4**

There is no requirement to stack test the charge handling emissions in order to prove compliance with Condition D.1.1, which is the PM limit pursuant to 326 IAC 6-1-2 (Nonattainment Area Particulate Limitations).

### **Comment #5**

Regarding Condition D.2.1 of the permit, it is unclear how compliance can be shown because the furnace emissions are fugitive. There are no stacks or control devices on the furnace therefore it will be impossible to perform PM testing as required. We request that this requirement be waived.

### **Response #5**

A stack test condition is included in the permit because the particulate matter (PM) emissions from the furnaces are subject to a very stringent limit pursuant to 326 IAC 6-1-2 (Nonattainment Area Particulate Limitations) which requires emissions to be limited to 0.07 grains per dry standard cubic foot of exhaust air. These furnaces have never been tested to determine compliance with this emission limit. The source may need to construct a temporary enclosure in order to test the emissions from the furnaces. Further details for the stack test requirements can be established during protocol review.

### **Comment #6**

There is no control device on the Pinlift shakeout system (unit 9A). We request that the testing requirement be waived until such time as a control device is installed.

### **Response #6**

Requirements to conduct stack tests are not solely for controlled emission units. A stack test condition is included in the permit because the particulate matter (PM) emissions from the Pinlift shakeout system are subject to a very stringent limit pursuant to 326 IAC 6-1-2 (Nonattainment Area Particulate Limitations) which requires emissions to be limited to 0.03 grains per dry standard cubic foot of exhaust air. This facility has never been stack tested to determine compliance with this emission limit. Since this facility is uncontrolled, the OAM believes that the facility may not be in compliance with the emission limit. Most foundries control particulate emissions from shakeout systems. The best way to determine compliance in this particular case is to conduct a stack test. The source has not indicated that a control device will be installed on this process at all; therefore, there is no reason to delay the stack test until a control device is installed.

### **Comment #7**

We propose removing the compliance testing requirements for each of the three shotblasters because it is uncertain that the allowable emissions will exceed 10 pounds per hour. Furthermore, it will be difficult to construct a stack to comply with method 5 testing requirements based on the current control device configuration.

### **Response #7**

Stack test conditions are included in the permit for the Tumbleblast and Tableblast shotblasters because the particulate matter (PM) emissions from the Tumbleblast and Tableblast shotblasters are subject to a very stringent limit pursuant to 326 IAC 6-1-18 (Nonattainment Area Particulate Limitations) which requires emissions to be limited to 0.030 grains per dry standard cubic foot of exhaust air and 0.037 grains per dry standard cubic foot of exhaust air respectively. A stack test condition is included in the permit for the Spinnerblast shotblaster because the particulate matter (PM) emissions from the Spinnerblast shotblaster are subject to a very stringent limit pursuant to 326 IAC 6-1-2 (Nonattainment Area Particulate Limitations) which requires emissions to be limited to 0.03 grains per dry standard cubic foot of exhaust air. These units have never been stack tested to determine compliance with these emission limits.

IDEM's compliance monitoring guidance states that a compliance monitoring plan is required only if:

- (a) the unit emits particulate matter, sulfur dioxide, or volatile organic compounds; and
- (b) the unit has existing applicable requirements; and
- (c) the unit is subject to a NSPS or NESHAP (for these units current requirements will satisfy as a compliance monitoring plan); or

- (d) the unit has a control device and the allowable emissions exceed 10 pounds per hour; or
- (e) the unit does not have a control device and has actual emissions exceeding 25 tons per year.

The guidance does not state that if a facility does not meet the above requirements, compliance monitoring or stack testing will never be necessary. It does state that a compliance monitoring plan is not required to be submitted with the application.

**Comment #8**

Please change the required pressure drop ranges for the baghouses controlling each of the shotblasters to 0 to 8 inches of water.

**Response #8**

The draft permit required a range of 5 to 8 inches of water for each of the baghouses. The OAM does not agree that a pressure drop range of 0 is appropriate for a baghouse. If the pressure drop is zero, that would indicate a problem with the baghouse because there would be no resistance to the emissions being pushed through the baghouse (i.e. the filter media is missing). Even a pressure drop of 1 would most likely indicate a baghouse problem or a problem with the pressure gauge itself. The OAM will agree to change the pressure drop range to 2 to 8 inches of water. If these units can show compliance with the emission limits during the required stack test while the baghouse shows a pressure drop of less than 2, then the OAM will agree to amend the permit accordingly.

**Comment #9**

Since many stack tests are required, we propose that the timing for the tests be changed as follows:

<b>Emission Unit Description</b>	<b>Testing required in:</b>
Tumbleblast	180 days
Tableblast	180 days
Spinnerblast	180 days
Herman/Slinger Shakeout	2 years
Pinlift Shakeout	2 years
Muller Sand System	2 years
Electric Induction Furnaces	3 years
Pouring/Casting	4 years
Scrap Preheater	4 years

**Response #9**

The OAM agrees. The stack test requirements have been spread out as requested.

Upon further review, the OAM has decided to make the following changes to the permit.

- (1) Condition C.2 has been reworded to reflect recent rule changes. Changes to the condition are shown as follows (deletions are shown as strikeouts and additions are shown in bold):

## C.2 Opacity [326 IAC 5-1]

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

- (a) ~~Visible emissions~~ **Opacity** shall not exceed an average of thirty percent (30%) ~~opacity~~ in ~~twenty four (24) consecutive readings~~ **any one (1) six (6) minute averaging period**, as determined in 326 IAC 5-1-4.
  - (b) ~~Visible emissions~~ **Opacity** shall not exceed sixty percent (60%) ~~opacity~~ 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 overlapping integrated averages for a continuous opacity monitor** in a six (6) hour period.
- (2) The conditions describing requirements in the event of bag failure have been modified to clarify that if the baghouse failure qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions, then operations can continue. Modified Condition D.7.8 is shown below. Conditions D.8.8 and D.9.8 have also been modified as shown below.

## D.7.8 Broken or Failed Bag or Failure Detection

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In the event that bag failure has been observed.

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. ~~For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced.~~ **Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).**
  - (b) ~~Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion.~~ **For single compartment baghouses, 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).**
- (3) Upon further review the OAM has determined that a stack test requirement should be included in the permit for PM emissions from the pouring/casting operation. The particulate matter (PM) emissions from the pouring/casting process are subject to a very stringent limit pursuant to 326 IAC 6-1-2 (Nonattainment Area Particulate Limitations) which requires emissions to be limited to 0.03 grains per dry standard cubic foot of exhaust air. This emission unit is uncontrolled and has never been stack tested to determine compliance with the emission limit. Therefore, a requirement to stack test the pouring/casting process has been added to Section D.3 of the permit.

- (4) Condition D.2.3 requires a stack test for the electric induction furnaces. For clarification purposes, the condition has been modified as follows (additions are shown in bold):

D.2.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

Within 180 days after the issuance of this permit, the Permittee shall perform PM testing **on each of the furnaces (or on a representative furnace as determined by the OAM during protocol review)** using methods as approved by the Commissioner, in order to demonstrate compliance with condition D.2.1. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

- (5) The pressure drop ranges for the wet scrubbers have been changed from 1 to 9.5 inches of water to 4 to 9.5 inches of water. These changes have been made based on the manufacturer's recommendations for operating the wet scrubbers.
- (6) IDEM now believes that the Credible Evidence provision is not necessary and has removed it from the permit. The issues regarding credible evidence can be adequately addressed during a showing of compliance or noncompliance. Indiana's statutes, and the rules adopted under their authority, govern the admissibility of evidence in any proceeding. Indiana law contains no provisions that limit the use of any credible evidence and an explicit statement is not required in the permit.

~~B.28 Credible Evidence [326 IAC 2-7-5(3)][62 Federal Register 8313][326 IAC 2-7-6]~~

~~Notwithstanding the conditions of this permit that state specific methods that may be used to assess compliance or noncompliance with applicable requirements, other credible evidence may be used to demonstrate compliance or non-compliance.~~

Company Name: South Bend Acquisition Corporation  
 Address: South Bend, Indiana  
 Permit Number: 141-6210-00010

Process	Limited Emissions	Truncated
	PM10 (tons/yr)	PM10 limits (lbs/hr)
charging	5.62	2.16
melting	13.43	5.16
pouring	32.17	12.36
cooling	21.86	8.40
shakeout 6A	0.7	0.27
shakeout 9A	0.58	0.22
magnesium treatment	14.06	10.80
green sand handling	1.1	0.65

Metal throughput limit for charging, melting, pouring, cooling, and shakeout 6A  
 31,234 tons/yr / 6 tons/hr = 5206 hrs/yr

Metal throughput limit for shakeout 9A  
 26280 tons/yr / 5 tons/hr = 5256 hrs/yr

Metal throughput limit for magnesium treatment  
 15,616.89 tons/yr / 6 tons/hr = 2603 hrs/yr

Sand throughput limit for green sand handling  
 203,019.57 tons/yr / 60 tons/hr = 3384 hrs/yr

Potential Emissions

Appendix A: Emission Calculations

Company Name: South Bend Acquisition Corporation  
 Plant Location: 220 W. Eckman Street, South Bend, IN 46601  
 County: St. Joseph  
 Permit Reviewer: Nisha Sizemore  
 Title V #: 141-6210  
 Plt. ID #: 141-00010

\* \* Process Emissions \* \*

Process:	Rate (tons iron/hr)	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Eac (ton/yr)	Type of control
Scrap and Charge Handling, Preheating	6	PM	0.60	15.77	15.77	
SCC# 3-04-003-15		PM-10	0.36	9.46	9.46	
AP-42 Ch. 12.10		SO2	0.00	0.00	0.00	
		NOx	0.00	0.00	0.00	
		VOC	0.00	0.00	0.00	
		CO	0.00	0.00	0.00	
		Lead	0.00	0.00	0.00	

Allowable Emissions:

The following calculations determine PM compliance with 326 IAC 6-3-2 for process weight rates less than 30 tons per hour:

P= 6 tons/hr

limit =  $4.1 \times (6^{0.67}) = 13.6 \text{ lb/hr}$  (allowable)

with potential:  
 $15.77 \text{ tons/yr} \times 2000 \text{ lb/ton} / 8760 \text{ hr/yr} = 3.6 \text{ lb/hr}$  (will comply)

South Bend Acquisition Corporation  
 220 W. Eckman Street, South Bend, IN 46601

T 141-6210  
 Plt ID 141-00010

Process:	Rate (tons iron/hr)	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Eac (ton/yr)	Type of control
Melting - (3) Electric Induction Furnaces	6	PM	0.90	23.65	23.65	
		PM-10	0.86	22.60	22.60	
		SO2	0.00	0.00	0.00	
		NOx	0.00	0.00	0.00	
EPA SCC# 3-04-003-03		VOC	0.00	0.00	0.00	
AP-42 Ch. 12.10		CO	0.00	0.00	0.00	
		Lead	0.05	1.20	1.20	

*Allowable Emissions:*

The following calculations determine PM compliance with 326 IAC 6-3-2 for process weight rates less than 30 tons per hour:

$$P = 6 \text{ tons/hr}$$

$$\text{limit} = 4.1 \times (6^{0.67}) = 13.6 \text{ lb/hr (allowable)}$$

$$\text{with potential: } 23.65 \text{ tons/yr} \times 2000 \text{ lb/ton} / 8760 \text{ hr/yr} = 5.4 \text{ lb/hr (will comply)}$$

Process:	Rate (tons iron/hr)	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Eac (ton/yr)	Type of control
Pouring/Casting SCC# 3-04-003-18	6.0	PM	4.20	110.38	110.38	
		PM-10	2.06	54.14	54.14	
		SO2	0.02	0.53	0.53	
		NOx	0.01	0.26	0.26	
		VOC	0.00	0.00	0.00	
		CO	---	0.00	0.00	
		Lead	---	0.00	0.00	

*Allowable Emissions:*

The following calculations determine PM compliance with 326 IAC 6-3-2 for process weight rates less than 30 tons per hour:

P= 52 tons/hr

limit =  $55 \times (52^{0.11}) - 40 = 44.9 \text{ lb/hr}$  (allowable)

with potential:

$110.4 \text{ tons/yr} \times 2000 \text{ lb/ton} / 8760 \text{ hr/yr} = 25.2 \text{ lb/hr}$  (will comply)

Process:	Rate (tons iron/hr)	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Eac (ton/yr)	Type of control
Castings Cooling SCC# 3-04-003-25	6.0	PM	1.40	36.79	36.79	none
		PM-10	1.40	36.79	36.79	none
		SO2	0.00	0.00	0.00	
		NOx	0.00	0.00	0.00	
		VOC	0.00	0.00	0.00	
		CO	---	0.00	0.00	
		Lead	---	0.00	0.00	

*Allowable Emissions:*

The following calculations determine PM compliance with 326 IAC 6-3-2 for process weight rates less than 30 tons per hour:

P= 52 tons/hr

limit =  $55 \times (52^{0.11}) - 40 = 44.9 \text{ lb/hr}$  (allowable)

with potential:

$36.79 \text{ tons/yr} \times 2000 \text{ lb/ton} / 8760 \text{ hr/yr} = 8.4 \text{ lb/hr}$  (will comply)

South Bend Acquisition Corporation  
 220 W. Eckman Street, South Bend, IN 46601

T 141-6210  
 Plt ID 141-00010

Process:	Rate (tons iron/hr)	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Eac (ton/yr)	Type of control	
Castings Shakeout	13.5	PM	3.20	189.22	3.78	wet scrubber	98.0%
Machine 6A		PM-10	2.24	132.45	2.65	CE-1A	98.0%
SCC# 3-04-003-31		SO2	0.00	0.00	0.00		
AP-42 Ch. 12.10		NOx	0.00	0.00	0.00		
		VOC	1.20	70.96	70.96		
		CO	---	0.00	0.00		
		Lead	---	0.00	0.00		

*Allowable Emissions:*

The following calculations determine PM compliance with 326 IAC 6-3-2 for process weight rates less than 30 tons per hour:

P= 30 tons/hr

limit =  $55 \times (30^{0.11})^{-40} = 40.0 \text{ lb/hr}$  (allowable)

with potential:

$3.8 \text{ tons/yr} \times 2000 \text{ lb/ton} / 8760 \text{ hr/yr} = 0.9 \text{ lb/hr}$  (will comply)

Process:	Rate (tons iron/hr)	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Eac (ton/yr)	Type of control	
Castings Shakeout	5.0	PM	3.20	70.08	1.40	wet scrubber	98.0%
Machine 9A		PM-10	2.24	49.06	0.98	CE-1A	98.0%
SCC# 3-04-003-31		SO2	0.00	0.00	0.00		
AP-42 Ch. 12.10		NOx	0.00	0.00	0.00		
		VOC	1.20	26.28	26.28		
		CO	---	0.00	0.00		
		Lead	---	0.00	0.00		

*Allowable Emissions:*

The following calculations determine PM compliance with 326 IAC 6-3-2 for process weight rates less than 30 tons per hour:

P= 16 tons/hr Note: P includes the weight of the sand.

limit =  $4.1 \times (16^{0.67}) = 26.3 \text{ lb/hr}$  (allowable)

with potential:

$1.4 \text{ tons/yr} \times 2000 \text{ lb/ton} / 8760 \text{ hr/yr} = 0.3 \text{ lb/hr}$  (will comply)

South Bend Acquisition Corporation  
 220 W. Eckman Street, South Bend, IN 46601

T 141-6210  
 Plt ID 141-00010

Process:	Rate (tons iron/hr)	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Eac (ton/yr)	Type of control	
Castings Cleaning/Finishing Tumbleblast 3	12.500	PM	17.00	111.69	2.23	Baghouses	98.0%
		PM-10	1.70	11.17	0.22	CE-2, CE-3, CE-4	98.0%
		SO2	0.00	0.00	0.00		
SCC# 3-04-003-40		NOx	0.00	0.00	0.00		
AP-42 Ch. 12.10		VOC	0.00	0.00	0.00		
		CO	0.00	0.00	0.00		
		Lead	---	0.00	0.00		

*Allowable Emissions:*

The following calculations determine PM compliance with 326 IAC 6-3-2 for process weight rates less than 30 tons per hour:

P= 12.5 tons/hr

limit =  $4.1 \times (12.5^{0.67}) = 22.3 \text{ lb/hr}$  (allowable)

with potential:

$2.23 \text{ tons/yr} \times 2000 \text{ lb/ton} / 8760 \text{ hr/yr} = 0.5 \text{ lb/hr}$  (will comply)

Process:	Rate (tons iron/hr)	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Eac (ton/yr)	Type of control	
Castings Cleaning/Finishing Tableblast 4	3.000	PM	17.00	111.69	2.23	Baghouses	98.0%
		PM-10	1.70	11.17	0.22	CE-2, CE-3, CE-4	98.0%
		SO2	0.00	0.00	0.00		
SCC# 3-04-003-40		NOx	0.00	0.00	0.00		
AP-42 Ch. 12.10		VOC	0.00	0.00	0.00		
		CO	0.00	0.00	0.00		
		Lead	---	0.00	0.00		

*Allowable Emissions:*

The following calculations determine PM compliance with 326 IAC 6-3-2 for process weight rates less than 30 tons per hour:

P= 3 tons/hr

limit =  $4.1 \times (3^{0.67}) = 8.6 \text{ lb/hr}$  (allowable)

with potential:

$2.23 \text{ tons/yr} \times 2000 \text{ lb/ton} / 8760 \text{ hr/yr} = 0.5 \text{ lb/hr}$  (will comply)

South Bend Acquisition Corporation  
 220 W. Eckman Street, South Bend, IN 46601

T 141-6210  
 Plt ID 141-00010

Process:	Rate (tons iron/hr)	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Eac (ton/yr)	Type of control
Castings Cleaning/Finishing	1.500	PM	17.00	111.69	2.23	Baghouses 98.0%
		PM-10	1.70	11.17	0.22	CE-2, CE-3, CE-4 98.0%
Spinnerblast 7		SO2	0.00	0.00	0.00	
SCC# 3-04-003-40		NOx	0.00	0.00	0.00	
AP-42 Ch. 12.10		VOC	0.00	0.00	0.00	
		CO	0.00	0.00	0.00	
		Lead	---	0.00	0.00	

*Allowable Emissions:*

The following calculations determine PM compliance with 326 IAC 6-3-2 for process weight rates less than 30 tons per hour:

P= 1.5 tons/hr

limit =  $4.1 \times (1.5^{0.67}) = 5.4 \text{ lb/hr}$  (allowable)

with potential:

$2.23 \text{ tons/yr} \times 2000 \text{ lb/ton} / 8760 \text{ hr/yr} = 0.5 \text{ lb/hr}$  (will comply)

Process:	Rate (tons sand/hr)	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Eac (ton/yr)	Type of control
Sand Handling	5	PM	3.6	78.8	78.8	
EPA SCC# 3-04-003-50		PM-10	0.54	11.8	11.8	
Alphaset sand system						

*Allowable Emissions:*

The following calculations determine PM compliance with 326 IAC 6-3-2 for process weight rates less than 30 tons per hour:

P= 5 tons/hr

limit =  $4.1 \times (5^{0.67}) = 12.1 \text{ lb/hr}$  (allowable)

with potential:

$78.8 \text{ tons/yr} \times 2000 \text{ lb/ton} / 8760 \text{ hr/yr} = 18.0 \text{ lb/hr}$  (will not comply)

Process:	Rate (tons sand/hr)	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Eac (ton/yr)	Type of control
Sand Handling	1.25	PM	3.6	19.7	19.7	
EPA SCC# 3-04-003-50		PM-10	0.54	3.0	3.0	
No-bake sand system						

*Allowable Emissions:*

The following calculations determine PM compliance with 326 IAC 6-3-2 for process weight rates less than 30 tons per hour:

P= 1.25 tons/hr

limit =  $4.1 \times (1.25^{0.67}) = 4.8 \text{ lb/hr}$  (allowable)

with potential:

$19.7 \text{ tons/yr} \times 2000 \text{ lb/ton} / 8760 \text{ hr/yr} = 4.5 \text{ lb/hr}$  (will comply)

Process:	Rate (tons sand/hr)	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Eac (ton/yr)	Type of control
Sand Handling	2.11	PM	3.6	33.3	33.3	
EPA SCC# 3-04-003-50		PM-10	0.54	5.0	5.0	
Oil shell core sand system						

*Allowable Emissions:*

The following calculations determine PM compliance with 326 IAC 6-3-2 for process weight rates less than 30 tons per hour:

P= 2.11 tons/hr

limit =  $4.1 \times (2.11^{0.67}) = 6.8 \text{ lb/hr}$  (allowable)

with potential:

$33.3 \text{ tons/yr} \times 2000 \text{ lb/ton} / 8760 \text{ hr/yr} = 7.6 \text{ lb/hr}$  (will not comply)

South Bend Acquisition Corporation  
 220 W. Eckman Street, South Bend, IN 46601

T 141-6210  
 Plt ID 141-00010

Process:	Rate (tons sand/hr)	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Eac (ton/yr)	Type of control	
Sand Handling	60	PM	3.6	946.1	18.9	wet scrubber	98.00%
EPA SCC# 3-04-003-50		PM-10	0.54	141.9	2.8	CE-1B	98.00%
Muller Sand System							

*Allowable Emissions:*

The following calculations determine PM compliance with 326 IAC 6-3-2 for process weight rates greater than 30 tons per hour:

P= 60 tons/hr

limit =  $55 \times (60^{0.11}) - 40 = 46.3 \text{ lb/hr}$  (allowable)

with potential:

$18.9 \text{ tons/yr} \times 2000 \text{ lb/ton} / 8760 \text{ hr/yr} = 4.3 \text{ lb/hr}$  (will comply)

South Bend Acquisition Corporation  
 220 W. Eckman Street, South Bend, IN 46601

T 141-6210  
 Plt ID 141-00010

Process:	Rate (tons iron/hr)	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Eac (ton/yr)	Type of control
Magnesium Treatment	6	PM	1.80	47.30	47.30	
SCC# 3-04-003-21		PM-10	1.80	47.30	47.30	none
AP-42 Ch 12.10		SO2	0.00	0.00	0.00	none
		NOx	0.00	0.00	0.00	none
		VOC	0.01	0.13	0.13	none
		CO	0.00	0.00	0.00	none
		Lead	0.04	1.12	1.12	none

*Allowable Emissions:*

The following calculations determine PM compliance with 326 IAC 6-3-2 for process weight rates less than 30 tons per hour:

P = 6 tons/hr

limit =  $4.1 \times (6^{0.67}) = 13.6 \text{ lb/hr}$  (allowable)

with potential:

$47.3 \text{ tons/yr} \times 2000 \text{ lb/ton} / 8760 \text{ hr/yr} = 10.8 \text{ lb/hr}$  (will comply)

South Bend Acquisition Corporation  
 220 W. Eckman Street, South Bend, IN 46601

T 141-6210  
 Plt ID 141-00010

Process:	Rate (tons sand/hr)	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Eac (ton/yr)	Type of control
Sand Handling	0.355	PM	3.6	5.6	5.6	
EPA SCC# 3-04-003-50		PM-10	0.54	0.8	0.8	
Alphaset sand system						

$$0.355 \text{ tons/hr} \times 8760 \text{ hrs/yr} = 3109.8 \text{ tons sand/year}$$

Process:	Rate (tons sand/hr)	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Eac (ton/yr)	Type of control
Sand Handling	0.925	PM	3.6	14.6	14.6	
EPA SCC# 3-04-003-50		PM-10	0.54	2.2	2.2	
No-bake sand system						

$$0.925 \text{ tons/hr} \times 8760 \text{ hrs/yr} = 8103 \text{ tons sand/year}$$

Process:	Rate (tons sand/hr)	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Eac (ton/yr)	Type of control
Sand Handling	0.32	PM	3.6	5.0	5.0	
EPA SCC# 3-04-003-50		PM-10	0.54	0.8	0.8	
Oil shell core sand system						

$$0.32 \text{ tons/hr} \times 8760 \text{ hrs/yr} = 2803.2 \text{ tons sand/year}$$

**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

1 lb = 2000 tons