



Mitchell E. Daniels, Jr.  
Governor

Thomas W. Easterly  
Commissioner

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

TO: Interested Parties / Applicant  
DATE: December 4, 2007  
RE: INTAT Precision, Inc. / 139-22701-00011  
FROM: Matthew Stuckey, Deputy Branch Chief  
Permits Branch  
Office of Air Quality

### Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures  
FNPER.dot12/03/07



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We make Indiana a cleaner, healthier place to live.*

---

Mitchell E. Daniels, Jr.  
Governor

100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251  
(317) 232-8603  
(800) 451-6027  
www.IN.gov/idem

Thomas W. Easterly  
Commissioner

Mr. Michael DeSmidt  
INTAT Precision, Inc.  
P.O. Box 488  
Rushville, IN 46173

December 4, 2007

Re: 139-22701-00011  
Significant Source Modification to:  
Part 70 Permit No.: T139-7531-00011

Dear Mr. DeSmidt:

INTAT Precision, Inc. was issued Part 70 operating permit T139-7531-00011 on September 2, 2003 for a stationary gray and ductile iron foundry. An application to modify the source was received on February 21, 2006. Pursuant to 326 IAC 2-7-10.5 the following emission units are approved for construction at the source:

- (1) One (1) shotblast unit, identified as Wheelabrator MeshBelt Blast, constructed in 2001, with a maximum capacity of 11.0 tons of metal per hour, with a flow rate of 4,800 cfm, with particulate matter emissions controlled by a baghouse DC-13 and exhausting internally.
- (2) Two shot blast units, identified as Pre-Blast ID #3055 and Final Blast ID #3090, constructed in 1997, each with a maximum capacity of 10 tons of metal per hour, utilizing one (1) baghouse (BH #6030) for particulate control, exhausting to stack ID # 6030A and 6030B.

The following construction conditions are applicable to the proposed project:

General Construction Conditions

1. The data and information supplied with the application shall be considered part of this source modification approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Quality (OAQ).
2. This approval to construct does not relieve the permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.
3. Effective Date of the Permit  
Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

4. Pursuant to 326 IAC 2-2-8(a)(1), approval to construct, under section 2(b) of 326 IAC 2-2, shall become invalid if construction is not commenced within eighteen (18) months after receipt of the approval, if construction is discontinued for a period of eighteen (18) months or more, or if construction is not completed within a reasonable time. The Commissioner may extend the eighteen (18) month period upon a satisfactory showing that an extension is justified.
5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.
6. Pursuant to 326 IAC 2-7-10.5(l) the emission units constructed under this approval shall not be placed into operation prior to revision of the source's Part 70 Operating Permit to incorporate the required operation conditions.

This significant source modification authorizes construction of the emission units. Operating conditions shall be incorporated into the Part 70 operating permit as a significant permit modification in accordance with 326 IAC 2-7-10.5(l)(2) and 326 IAC 2-7-12. Operation is not approved until the significant permit modification has been issued.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter call Trish Earls at (201) 722-1460, or dial (800) 451-6027 and ask for extension 3-6878.

Sincerely,

*Original signed by*  
Matthew Stuckey, Deputy Branch Chief  
Permits Branch  
Office of Air Quality

Attachments

TE/EVP

cc: File – Rush County  
Rush County Health Department  
Air Compliance Section Inspector  
Compliance Data Section  
Administrative and Development  
Technical Support and Modeling



Mitchell E. Daniels, Jr.  
Governor

Thomas W. Easterly  
Commissioner

100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251  
(317) 232-8603  
(800) 451-6027  
www.IN.gov/idem

## PREVENTION OF SIGNIFICANT DETERIORATION (PSD) PERMIT and PART 70 SIGNIFICANT SOURCE MODIFICATION OFFICE OF AIR QUALITY

**INTAT Precision, Inc.  
2148 State Road 3 North  
Rushville, Indiana 46173**

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

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

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17. This permit also addresses certain new source review requirements for existing equipment and is intended to fulfill the new source review procedures pursuant to 326 IAC 2-2 (PSD) and 326 IAC 2-7-10.5, applicable to those conditions.

|  |                                 |
|--|---------------------------------|
| Second Significant Source Modification No.:<br>139-22701-00011   |                                 |
| Issued by:<br><br><i>Original signed by</i><br>Matthew Stuckey, Deputy Branch Chief<br>Permits Branch<br>Office of Air Quality | Issuance Date: December 4, 2007 |

## TABLE OF CONTENTS

|  |   |
|--|---|
| <b>A. SOURCE SUMMARY</b>                                     | <b>6</b>  |
| A.1  | General Information [326 IAC 2-7-4(c)][326 IAC 2-7-5(15)][326 IAC 2-7-1(22)]  |
| A.2  | Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)]<br>[326 IAC 2-7-5(15)]                                     |
| A.3  | Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-7-4(c)]<br>[326 IAC 2-7-5(15)]                            |
| A.4  | Part 70 Permit Applicability [326 IAC 2-7-2]  |
| <b>B. GENERAL CONDITIONS</b>                                 | <b>11</b>   |
| B.1  | Definitions [326 IAC 2-7-1]   |
| B.2  | Permit Term [326 IAC 2-7-5(2)][326 IAC 2-1.1-9.5][326 IAC 2-7-4(a)(1)(D)]<br>[IC 13-15-3-6(a)]  |
| B.3  | Term of Conditions [326 IAC 2-1.1-9.5]  |
| B.4  | Enforceability [326 IAC 2-7-7]  |
| B.5  | Severability [326 IAC 2-7-5(5)]   |
| B.6  | Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]  |
| B.7  | Duty to Provide Information [326 IAC 2-7-5(6)(E)]   |
| B.8  | Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]   |
| B.9  | Annual Compliance Certification [326 IAC 2-7-6(5)]  |
| B.10   | Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)][326 IAC 2-7-6(1) and (6)]<br>[326 IAC 1-6-3]                                |
| B.11   | Emergency Provisions [326 IAC 2-7-16]   |
| B.12   | Permit Shield [326 IAC 2-7-15][326 IAC 2-7-20][326 IAC 2-7-12]  |
| B.13   | Prior Permits Superseded [326 IAC 2-1.1-9.5][326 IAC 2-7-10.5]  |
| B.14   | Termination of Right to Operate [326 IAC 2-7-10][326 IAC 2-7-4(a)]  |
| B.15   | Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]  |
| B.16   | Permit Modification, Reopening, Revocation and Reissuance, or Termination<br>[326 IAC 2-7-5(6)(C)][326 IAC 2-7-8(a)][326 IAC 2-7-9]     |
| B.17   | Permit Renewal [326 IAC 2-7-3][326 IAC 2-7-4][326 IAC 2-7-8(e)]   |
| B.18   | Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12][40 CFR 72]  |
| B.19   | Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)]<br>[326 IAC 2-7-12(b)(2)]                               |
| B.20   | Operational Flexibility [326 IAC 2-7-20][326 IAC 2-7-10.5]  |
| B.21   | Source Modification Requirement [326 IAC 2-7-10.5]  |
| B.22   | Inspection and Entry [326 IAC 2-7-6][IC 13-14-2-2][IC 13-30-3-1][IC 13-17-3-2]  |
| B.23   | Transfer of Ownership or Operational Control [326 IAC 2-7-11]   |
| B.24   | Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][326 IAC 2-1.1-7]   |
| B.25   | Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314] [326 IAC 1-1-6]   |
| <b>C. SOURCE OPERATION CONDITIONS</b>                        | <b>22</b>   |
| <b>Emission Limitations and Standards [326 IAC 2-7-5(1)]</b> |   |
| C.1  | Particulate Emission Limitations For Processes with Process Weight Rates<br>Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2] |
| C.2  | Opacity [326 IAC 5-1]   |
| C.3  | Open Burning [326 IAC 4-1] [IC 13-17-9]   |
| C.4  | Incineration [326 IAC 4-2] [326 IAC 9-1-2]  |
| C.5  | Fugitive Dust Emissions [326 IAC 6-4]   |
| C.6  | Stack Height [326 IAC 1-7]  |
| C.7  | Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]   |

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

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

**Compliance Requirements [326 IAC 2-1.1-11]**

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

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

- C.10 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)]
- C.11 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]
- C.12 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)]  
[326 IAC 2-7-6(1)]

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

- C.13 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]
- C.14 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]
- C.15 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]
- C.16 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]  
[326 IAC 2-7-6]

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

- C.18 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]  
[326 IAC 2-2][326 IAC 2-3]
- C.19 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]  
[326 IAC 2-2][326 IAC 2-3]

**Stratospheric Ozone Protection**

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

**D.1. EMISSIONS UNIT OPERATION CONDITIONS - Core Production ..... 31**

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

- D.1.1 Particulate [326 IAC 6-3-2]
- D.1.2 PSD Minor Limit [326 IAC 2-2]
- D.1.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

**Compliance Determination Requirements**

- D.1.4 Particulate Control [326 IAC 2-7-6(6)]

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

- D.1.5 Visible Emissions Notations
- D.1.6 Parametric Monitoring
- D.1.7 Broken or Failed Baghouse and Cartridge Collector Detection

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

- D.1.8 Record Keeping Requirement

**D.2 FACILITY OPERATION CONDITIONS - Plant 1 Melting and Finishing Operations and Casting Line 2 ..... 34**

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

- D.2.1 BACT for PM10 [326 IAC 2-2-3]
- D.2.2 PSD Minor Limit [326 IAC 2-2]
- D.2.3 PSD Minor Limits for PM and PM10 [326 IAC 2-2]
- D.2.4 PSD Minor Limits for PM [326 IAC 2-2]
- D.2.5 Particulate [326 IAC 6-3-2]
- D.2.6 Volatile Organic Compounds (VOC) [326 IAC 2-2-3][326 IAC 8-1-6]

- D.2.7 CO Emissions PSD Minor Limit [326 IAC 2-2]
- D.2.8 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

**Compliance Determination Requirements**

- D.2.9 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]
- D.2.10 Particulate Control [32 IAC 2-7-6(6)]
- D.2.11 VOC Control [326 IAC 2-2-3][326 IAC 8-1-6]

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

- D.2.12 Visible Emissions Notations
- D.2.13 Parametric Monitoring
- D.2.14 Broken or Failed Baghouse and Cartridge Collector Detection
- D.2.15 Parametric Monitoring of Advanced Oxidation (AO) System

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

- D.2.16 Record Keeping Requirements
- D.2.17 Reporting Requirements

**D.3 FACILITY OPERATION CONDITIONS - 1997 Foundry Line ..... 45**

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

- D.3.1 PSD Minor Limit [326 IAC 2-2]
- D.3.2 PSD Minor Limit [326 IAC 2-2]
- D.3.3 Particulate (PM) [326 IAC 6-3-2]
- D.3.4 Volatile Organic Compounds (VOC) [326 IAC 2-2-3] [326 IAC 8-1-6]
- D.3.5 CO Emissions PSD Minor Limit [326 IAC 2-2]
- D.3.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

**Compliance Determination Requirements**

- D.3.7 Testing Requirements [326 IAC 2-7-6(1),(6)]
- D.3.8 Particulate Control [32 IAC 2-7-6(6)]

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

- D.3.9 Visible Emissions Notations
- D.3.10 Parametric Monitoring
- D.3.11 Broken or Failed Baghouse and Cartridge Collector Detection

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

- D.3.12 Record Keeping Requirements
- D.3.13 Reporting Requirements

**D.4 FACILITY OPERATION CONDITIONS - Insignificant Activities..... 52**

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

- D.4.1 Particulate Matter (PM)[326 IAC 6-2]
- D.4.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]
- D.4.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]
- D.4.4 Particulate [326 IAC 6-3-2(d)]

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

- D.4.5 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants under 40 CFR Part 63 [326 IAC 20-1] [40 CFR Part 63, Subpart A]
- D.4.6 Surface Coating of Miscellaneous Metal Parts and Products NESHAP Requirements [40 CFR Part 63, Subpart M] [326 IAC 20-80]

- D.4.7 One Time Deadlines Relating to National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products [40 CFR Part 63, Subpart Mmmm]

**E.1 FACILITY OPERATION CONDITIONS - Foundry Operations..... 76**

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

- E.1.1 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants under 40 CFR Part 63 [326 IAC 20-1] [40 CFR Part 63, Subpart A]
- E.1.2 National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Requirements [40 CFR Part 63, Subpart EEEEE] [326 IAC 20-92]
- E.1.3 One Time Deadlines Relating to National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries [40 CFR Part 63, Subpart EEEEE]

**E.2 FACILITY OPERATION CONDITIONS - Resin Storage Tanks ..... 94**

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

- E.2.1 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants under 40 CFR Part 63 [326 IAC 20-1] [40 CFR Part 63, Subpart A]
- E.2.2 Organic Liquids Distribution (Non-Gasoline) NESHAP Requirements [40 CFR Part 63, Subpart EEEE] [326 IAC 20-83]
- E.2.3 One Time Deadlines Relating to National Emission Standards for Hazardous Air Pollutants for Organic Liquids Distribution (Non-Gasoline) [40 CFR Part 63, Subpart EEEE]

|  |                |
|--|----------------|
| <b>Certification</b>   | <b>114</b>     |
| <b>Emergency Occurrence Report</b>                               | <b>115</b>     |
| <b>Quarterly Reports</b>   | <b>117-125</b> |
| <b>Quarterly Deviation and Compliance Monitoring Report.....</b> | <b>126</b>     |

## SECTION A SOURCE SUMMARY

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

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

---

The Permittee owns and operates a stationary gray and ductile iron foundry.

|                              |  |
|------------------------------|--|
| Source Address:              | 2148 State Road 3 North, Rushville, Indiana 46173  |
| Mailing Address:             | P.O. Box 488, Rushville, Indiana 46173   |
| General Source Phone Number: | 317-932-5323   |
| SIC Code:                    | 3321   |
| County Location:             | Rush   |
| Source Location Status:      | Attainment for all criteria pollutants   |
| Source Status:               | Part 70 Operating Permit Program<br>Major Source, under PSD Rules<br>Major Source, Section 112 of the Clean Air Act<br>1 of 28 Source Categories |

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

---

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

- (a) Core production facilities consisting of:
  - (1) Three (3) core sand bins and four (4) isocure cold box core machines, identified as P4, P5, P6 and P7, with P4, P5, and P6 constructed in 1988 and P7 constructed in 1994, each with a maximum capacity of processing 0.5 ton of core sand per hour, 8.0 pounds of resin per ton of core sand per hour and 1.12 pounds of DMIPA catalyst per ton of core sand, utilizing a cartridge collector for particulate control, exhausting to stack ID No. 9.
- (b) One (1) gray and ductile iron foundry line, constructed in 1988, identified as Plant 1, consisting of the following:
  - (1) Melting and Finishing Operations originally constructed in 1988 and modified in 2004, consisting of:
    - (A) One (1) indoor charge handling system for the three (3) electric induction furnaces, with a total maximum throughput capacity of 20 tons of metal per hour, consisting of three (3) units, identified as P1, P2, and P3, each with a maximum throughput capacity of 10 tons of metal per hour;

Note: The power control system at the plant limits the total maximum throughput of the charge handling system to 20 tons of metal per hour.

- (B) One (1) melting system, identified as P8, with a maximum capacity of 20 tons of metal per hour, consisting of three (3) electric induction furnaces, each with a melting capacity of 10 tons per hour, utilizing two (2) cartridge collectors for particulate control, identified as DC-3A and DC-3B, exhausting to a common stack ID No. 3;
- Note: The maximum throughput of metal for the melting system is limited to 20 tons per hour by the maximum throughput from the charge handling system of 20 tons of metal per hour.
- (C) One (1) holding system consisting of the following equipment:
- (1) Two (2) electric holding furnaces, identified as P9, each with a holding capacity of 50 tons and a total maximum throughput capacity of 100 tons of metal per hour;
  - (2) Two (2) natural gas-fired metal treatment ladle heaters constructed in 2004, each with a rated capacity of 1.0 MMBtu/hr.
  - (3) Two (2) natural gas-fired pouring ladle heaters (P10) constructed in 2004, each with a rated capacity of 0.4 MMBtu/hr.
- (D) One (1) inoculation system consisting of two (2) metal treatment ladles replaced in 2004 identified as P11, each with a maximum throughput capacity of 10 tons of metal per hour, controlled by Dust Collectors DC-3A and DC-3B for particulate control, exhausting to a common stack 3.
- (E) Grinding processes identified as P29 and P30, constructed in 1988, with a total capacity of 12 tons of metal per hour, controlled by dust collector DC-8A, exhausting to stack 8A.
- (2) Casting Line 2, constructed in 2004, with a capacity of 15 tons of metal per hour and 70 tons of sand per hour consisting of the following equipment:
- (A) One (1) sand system with a maximum capacity of 70 tons of sand per hour, consisting of units identified as P32B, P33B, P34B, P35B, P36B, P37B and P39B, controlled by baghouse BH6400, and exhausting to stack 6400.
  - (B) One (1) pouring station identified as P13B with a maximum capacity of 15 tons of metal poured per hour, controlled by dust collector DC3B, exhausting to stack 3.
  - (C) One (1) cooling line identified as P14B, with a maximum capacity of 15 tons of metal per hour, controlled by baghouse BH6200, exhausting to stack 6200.
  - (D) One (1) shakeout unit identified as P16B, with a maximum capacity of 15 tons of metal per hour, controlled by baghouse BH6200, exhausting to stack 6200.
  - (E) One (1) lad heat shakeout unit controlled by dust collector DC-5, exhausting to stack 5.

- (F) Casting conveyors and desprue operations, identified as P17B, P18B, P19B, P20B, P21B, and P22B, with a maximum capacity of 15 tons of metal per hour, controlled by baghouses DC-7, and DC-8B, exhausting inside the building, and baghouse BH6200 exhausting to stack ID #6200.
  - (G) One (1) Plant 1, Line 2 shot blast process consisting of three shot blast units identified as P40, P41 and P42 each with a maximum capacity of 5.3 tons of metal per hour and with a combined maximum capacity for all three of 9.0 tons of metal per hour, controlled by dust collector DC-8B, exhausting inside the building.
- (3) One (1) shotblast unit, identified as Wheelabrator MeshBelt Blast, constructed in 2001, with a maximum capacity of 11.0 tons of metal per hour, with particulate matter emissions controlled by a baghouse DC-13 and exhausting internally.
- (c) Plant 2, ductile iron foundry line, constructed in 1997, consisting of the following:
- (1) One (1) indoor charge handling system, identified as ID #1000A, with a maximum capacity of 10 tons of metal per hour;
  - (2) One (1) melting, inoculation and pouring system, identified as ID #1110, 1150 and 2000, respectively, with a maximum capacity of 10 tons of metal per hour, utilizing a baghouse (ID # BH6010) for particulate control, exhausting to stack ID #6010, consisting of the following equipment:
    - (A) Two (2) electric induction furnaces, each with a maximum capacity of 10 tons of metal per hour;
    - (B) One (1) electric holding furnace (uncontrolled);
    - (C) Two (2) natural gas-fired ladle heaters, identified as ID #6600 and 6610, each with a maximum heat input rate of 2 MMBtu per hour;
- Note: The maximum throughput of metal for the melting and pouring system is limited to 10 tons of metal per hour by the maximum throughput from the charge handling system of 10 tons of metal per hour and the power control systems at the plant.
- (3) One (1) mold machine, identified as ID #2010, with a maximum capacity of 10 tons of metal per hour and 70 tons of sand per hour, utilizing one (1) baghouse (ID # BH6010) for particulate control, exhausting to stack ID# 6010;
  - (4) One (1) casting cooling and conveyor system, identified as #2015 and 2020, respectively, with a maximum capacity of 10 tons of metal per hour and 70 tons of sand per hour, utilizing two (2) baghouses (ID # BH6020 and 6030) for particulate control exhausting to stack ID#s #6020 and 6030A and 6030B;
  - (5) One (1) casting shakeout system, identified as ID #3010, with a maximum capacity of 10 tons of metal per hour and 70 tons of sand per hour, utilizing one (1) baghouse (ID #BH6030) for particulate control, exhausting to stack ID#s 6030A and 6030B;

- (6) One (1) sand and waste sand handling system, identified as ID #4000, #4140, and 5000, with a maximum capacity of 70 tons of sand per hour, utilizing two (2) baghouses (BH6020 and 6040) for particulate control, exhausting to stack ID #s 6020 and 6040;
- (7) Two (2) shot blast units, identified as Pre-Blast ID #3055 and Final Blast ID #3090, each with a maximum capacity of 10 tons of metal per hour, utilizing one (1) baghouse (BH #6030) for particulate control, exhausting to stack ID # 6030A and 6030B;
- (8) One (1) finishing operation, identified as ID #8000, with a maximum capacity of 5.5 tons of metal per hour, consisting of trim presses, uncontrolled.

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

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

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units (Btu) per hour;
  - (1) Two (2) boilers, identified as P40 and P41, with a maximum heat capacity of 0.9 and 1.2 million British units per hour, respectively, each combusting natural gas;
  - (2) One (1) natural gas-fired heater to dry scrap metal in Plant 1 rated at 1.0 MMBtu per hour.
- (b) Combustion source flame safety purging on startup;
- (c) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids;
- (d) Refractory storage not requiring air pollution control equipment;
- (e) Application of oils, greases, lubricants or other nonvolatile materials applied as temporary protective coatings;
- (f) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6 (Maintenance parts cleaner using mineral spirits solvent that is 100% recycled, with a maximum throughput of 120 gallons per 12 months); [326 IAC 8-3-2]
- (g) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment;
- (h) Paved and unpaved roads and parking lots with public access;
- (i) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors, and electrostatic precipitators with design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations; including the following specifically regulated grinders:
  - (1) Six (6) bench grinders, identified as ID #8000, with a maximum capacity of 5.5 tons of metal per hour, utilizing fabric filters (FFA, FFB, FFC, FFD, and FFE) for control; four (4) grinders each controlled by one fabric filter, and two (2) grinders controlled by one (1) fabric filter, all exhausting inside the building.  
[326 IAC 6-3-2]

- (j) Filter or coalescer media change out;
- (k) Other activities or categories not previously identified:
  - (1) Six (6) scrap bays, identified as P47 through P52, each with PM emissions of approximately 0.16 pound per hour; [326 IAC 6-3-2]
  - (2) Two (2) sand towers, identified as P55 and P56, for the gray and ductile iron foundry line constructed in 1988 (emissions are included in sand handling calculations);
  - (3) Maintenance shop operations, identified as P58 and P59, each with PM emissions of approximately 0.1 pounds per hour; [326 IAC 6-3-2]
  - (4) Two (2) collector penthouses, identified as P53 and P54, each with PM emissions of approximately 0.16 pounds per hour; [326 IAC 6-3-2]
  - (5) One (1) material separator (cartridge filter fallout collection) with PM emissions approximately 0.6 pounds per hour; [326 IAC 6-3-2]
  - (6) One (1) paint booth, identified as CO5, used for machine part maintenance coating operations, with a maximum throughput rate of 120 metal units per hour, utilizing dry filters for particulate control, exhausting inside the building or through stack No. SCO5; [326 IAC 6-3-2]
  - (7) One (1) scrap yard;
  - (8) Two (2) fixed roof resin storage tanks, each with a maximum storage capacity of 2,000 gallons [40 CFR 63, Subpart EEEE].
- (l) One (1) sand tower for the ductile iron foundry line constructed in 1997, which house the sand silos, bond silos, sand mullers, and sand conveyors used with the sand handling operations; and
- (m) Unvented trim press operations for pinching or cleaving protruding metal from castings with no emissions.

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

---

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

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

## **SECTION B GENERAL CONDITIONS**

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

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

### **B.2 Permit Term [326 IAC 2-7-5(2)][326 IAC 2-1.1-9.5][326 IAC 2-7-4(a)(1)(D)][IC 13-15-3-6(a)]**

- (a) This permit, T139-7531-00011, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

### **B.3 Term of Conditions [326 IAC 2-1.1-9.5]**

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

- (a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or
- (b) the emission unit to which the condition pertains permanently ceases operation.

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

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

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

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

### **B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]**

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

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

- (a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.
- (b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by the "responsible official" of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.
- (c) The "responsible official" is defined at 326 IAC 2-7-1(34).

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

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

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

and

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

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

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

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

---

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

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

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

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

- (b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

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

---

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

- (2) The permitted facility was at the time being properly operated;
- (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

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

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

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

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

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

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

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

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
  - (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
  - (e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(9) be revised in response to an emergency.

- (f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
- (h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

**B.12 Permit Shield** ~~[326 IAC 2-7-15]~~~~[326 IAC 2-7-20]~~~~[326 IAC 2-7-12]~~

---

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

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

- (b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.
- (d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
  - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
  - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
  - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and

- (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (f) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(8)]

**B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5][326 IAC 2-7-10.5]**

---

- (a) All terms and conditions of permits established prior to T139-7531-00011 and issued pursuant to permitting programs approved into the state implementation plan have been either:
  - (1) incorporated as originally stated,
  - (2) revised under 326 IAC 2-7-10.5, or
  - (3) deleted under 326 IAC 2-7-10.5.
- (b) Provided that all terms and conditions are accurately reflected in this permit, all previous registrations and permits are superseded by this Part 70 operating permit.

**B.14 Termination of Right to Operate [326 IAC 2-7-10][326 IAC 2-7-4(a)]**

---

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

**B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]**

---

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

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

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

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

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

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

---

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:
- (1) That this permit contains a material mistake.
  - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
  - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]
- (c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

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

---

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

Request for renewal shall be submitted to:

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

- (b) A timely renewal application is one that is:
- (1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
  - (2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

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

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

---

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

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

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

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

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

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

---

- (a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.

- (b) Notwithstanding 326 IAC 2-7-12(b)(1) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

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

---

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

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

- (4) The Permittee notifies the:

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

and

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

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

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

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

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

- (1) A brief description of the change within the source;
- (2) The date on which the change will occur;
- (3) Any change in emissions; and
- (4) Any permit term or condition that is no longer applicable as a result of the change.

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

- (c) Emission Trades [326 IAC 2-7-20(c)]  
The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).
- (d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]  
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.

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

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

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

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

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

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy any records that must be kept under the conditions of this permit;
- (c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

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

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

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

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

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

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

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

B.25 Advanced Source Modification Approval [326 IAC 2-7-5(16)] [326 IAC 2-7-10.5]

- (a) The requirements to obtain a source modification approval under 326 IAC 2-7-10.5 or a permit modification under 326 IAC 2-7-12 are satisfied by this permit for the proposed emission units, control equipment or insignificant activities in Sections A.2 and A.3.
- (b) Pursuant to 326 IAC 2-1.1-9 any permit authorizing construction may be revoked if construction of the emission unit has not commenced within eighteen (18) months from the date of issuance of the permit, or if during the construction, work is suspended for a continuous period of one (1) year or more.

B.26 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314] [326 IAC 1-1-6]

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

## SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

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

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

C.2 Opacity [326 IAC 5-1]

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

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

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

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

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

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

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

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

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

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

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

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

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

All required notifications shall be submitted to:

Indiana Department of Environmental Management  
Asbestos Section, Office of Air Quality  
100 North Senate Avenue  
MC 61-52 IGCN 1003  
Indianapolis, Indiana 46204-2251

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

- (e) **Procedures for Asbestos Emission Control**  
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Demolition and Renovation**  
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) **Indiana Accredited Asbestos Inspector**  
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.

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

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

---

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

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

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

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

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

## Compliance Requirements [326 IAC 2-1.1-11]

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

---

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

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

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

---

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

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

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

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

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

**C.11 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]**

---

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

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

---

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

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

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

---

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

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

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

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

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

- (c) If the ERP is disapproved by IDEM, OAQ, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.
- (d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.

- (e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.
- (f) Upon direct notification by IDEM, OAQ that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level.  
[326 IAC 1-5-3]

C.14 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]

If a regulated substance, as defined in 40 CFR 68, is present at a source in more than a threshold quantity, the Permittee must comply with the applicable requirements of 40 CFR 68.

C.15 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]

- (a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:
  - (1) initial inspection and evaluation;
  - (2) recording that operations returned to normal without operator action (such as through response by a computerized distribution control system); or
  - (3) any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
- (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:
  - (1) monitoring results;
  - (2) review of operation and maintenance procedures and records; and/or
  - (3) inspection of the control device, associated capture system, and the process.
- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (e) The Permittee shall maintain the following records:
  - (1) monitoring data;
  - (2) monitor performance data, if applicable; and
  - (3) corrective actions taken.

**C.16 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5][326 IAC 2-7-6]**

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

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

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

**C.17 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]**

- (a) Pursuant to 326 IAC 2-6-3(b)(2), starting in 2005 and every three (3) years thereafter, the Permittee shall submit by July 1 an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:
  - (1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);
  - (2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1 (32) ("Regulated pollutant, which is used only for purposes of Section 19 of this rule") from the source, for purpose of fee assessment.

The statement must be submitted to:

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

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

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

C.18 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-2]  
[326 IAC 2-3]

---

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.
- (c) If there is a "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(II)) at an existing emissions unit other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(rr) and/or IAC 2-3-1(mm)), the Permittee shall comply with following:
  - (1) Before beginning actual construction of the "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(II)) at an existing emissions unit, document and maintain the following records:
    - (A) A description of the project.
    - (B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.
    - (C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:
      - (i) Baseline actual emissions;
      - (ii) Projected actual emissions;
      - (iii) Amount of emissions excluded under section 326 IAC 2-2-1(rr)(2)(A)(iii) and/or 326 IAC 2-3-1(mm)(2)(A)(iii); and
      - (iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.
  - (2) Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any existing emissions unit identified in (1)(B) above; and
  - (3) Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity of or the potential to emit that regulated NSR pollutant at the emissions unit.

C.19 General Reporting Requirements [326 IAC 2-7-5(3)(C)][326 IAC 2-1.1-11][326 IAC 2-2]  
[326 IAC 2-3]

---

- (a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

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

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.
- (f) If the Permittee is required to comply with the recordkeeping provisions of (c) in Section C - General Record Keeping Requirements for any "project" (as defined in 326 IAC 2-2-1(qq) at an existing emissions unit, and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ :
- (1) The annual emissions, in tons per year, from the project identified in (c)(1) in Section C - General Record Keeping Requirements exceed the baseline actual emissions, as documented and maintained under Section C - General Record Keeping Requirements (c)(1)(C)(i), by a significant amount, as defined in 326 IAC 2-2-1(xx) and/or 326 IAC 2-3-1(qq), for that regulated NSR pollutant, and
  - (2) The emissions differ from the preconstruction projection as documented and maintained under Section C - General Record Keeping Requirements (c)(1)(C)(ii).

The report for project at an existing emissions unit shall be submitted within sixty (60) days after the end of the year and contain the following:

- (1) The name, address, and telephone number of the major stationary source.
- (2) The annual emissions calculated in accordance with (c)(2) and (3) in Section C - General Record Keeping Requirements.
- (3) The emissions calculated under the actual-to-projected actual test stated in 326 IAC 2-2-2(d)(3).
- (4) Any other information that the Permittee deems fit to include in this report,

Reports required in this part shall be submitted to:

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

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

### **Stratospheric Ozone Protection**

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

---

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

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

## SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

### Emissions Unit Description:

- (a) Core production facilities consisting of:
- (1) Three (3) core sand bins and four (4) isocure cold box core machines, identified as P4, P5, P6 and P7, with P4, P5, and P6 constructed in 1988 and P7 constructed in 1994, each with a maximum capacity of processing 0.5 ton of core sand per hour, 8.0 pounds of resin per ton of core sand per hour and 1.12 pounds of DMIPA catalyst per ton of core sand, utilizing a cartridge collector for particulate control of the core sand bins, exhausting to stack ID No. 9.

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

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

#### D.1.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the core sand handling in the core sand bins operation shall not exceed 2.58 pounds per hour when operating at a process weight rate of 1,000 pounds of sand per hour.

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

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

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

#### D.1.2 PSD Minor Limit [326 IAC 2-2]

Total PM and PM10 emissions from the core sand handling in the core sand bins shall each not exceed 0.82 pound per hour.

Compliance with this emission limit, in addition to the emission limits listed in condition D.2.2, limits PM and PM10 emissions from the Plant 1 Melting Operations and the core machines constructed in 1988, each to less than 100 tons per year. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable.

#### D.1.3 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 these facilities and the cartridge collector for particulate control.

### Compliance Determination Requirements

#### D.1.4 Particulate Control [326 IAC 2-7-6(6)]

- (a) In order to comply with conditions D.1.1 and D.1.2, the cartridge collector for particulate control shall be in operation and control emissions from the core sand handling in the core sand bins at all times that the core sand handling in the core sand bins is in operation.

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

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

#### **D.1.5 Visible Emissions Notations**

---

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

#### **D.1.6 Parametric Monitoring**

---

The Permittee shall record the pressure drop across the cartridge collector used in conjunction with the core sand handling in the core sand bins, at least once per day when the core sand handling in the core sand bins is in operation. When for any one reading, the pressure drop across the cartridge collector is outside the normal range of 0.5 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C – Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C – Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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

#### **D.1.7 Broken or Failed Baghouse and Cartridge Collector Detection**

---

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

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

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

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

#### **D.1.8 Record Keeping Requirements**

---

- (a) To document compliance with Condition D.1.5, the Permittee shall maintain daily records of visible emission notations of the core sand handling operation cartridge collector stack exhaust. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation, (e.g. the process did not operate that day).
- (b) To document compliance with Condition D.1.6, the Permittee shall maintain once per day records of the pressure drop. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading, (e.g. the process did not operate that day).
- (c) All records shall be maintained in accordance with Section C – General Record Keeping Requirements, of this permit.

## SECTION D.2

## FACILITY OPERATION CONDITIONS

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

- (b) One (1) gray and ductile iron foundry line, constructed in 1988, identified as Plant 1, consisting of the following:
- (1) Melting and Finishing Operations originally constructed in 1988 and modified in 2004, consisting of:
- (A) One (1) indoor charge handling system for the three (3) electric induction furnaces, with a total maximum throughput capacity of 20 tons of metal per hour, consisting of three (3) units, identified as P1, P2, and P3, each with a maximum throughput capacity of 10 tons of metal per hour;
- Note: The power control system at the plant limits the total maximum throughput of the charge handling system to 20 tons of metal per hour.
- (B) One (1) melting system, identified as P8, with a maximum capacity of 20 tons of metal per hour, consisting of three (3) electric induction furnaces, each with a melting capacity of 10 tons per hour, utilizing two (2) cartridge collectors for particulate control, identified as DC-3A and DC-3B, exhausting to a common stack ID No. 3;
- Note: The maximum throughput of metal for the melting system is limited to 20 tons per hour by the maximum throughput from the charge handling system of 20 tons of metal per hour.
- (C) One (1) holding system consisting of the following equipment:
- (1) Two (2) electric holding furnaces, identified as P9, each with a holding capacity of 50 tons and a total maximum throughput capacity of 100 tons of metal per hour;
- (2) Two (2) natural gas-fired metal treatment ladle heaters constructed in 2004, each with a rated capacity of 1.0 MMBtu/hr.
- (3) Two (2) natural gas-fired pouring ladle heaters (P10) constructed in 2004, each with a rated capacity of 0.4 MMBtu/hr.
- (D) One (1) inoculation system consisting of two (2) metal treatment ladles replaced in 2004 identified as P11, each with a maximum throughput capacity of 10 tons of metal per hour, controlled by Dust Collectors DC-3A and DC-3B for particulate control, exhausting to a common stack 3.
- (E) Grinding processes identified as P29 and P30, constructed in 1988, with a total capacity of 12 tons of metal per hour, controlled by dust collector DC-8A, exhausting to stack 8A.
- (2) Casting Line 2, constructed in 2004, with a capacity of 15 tons of metal per hour and 70 tons of sand per hour consisting of the following equipment:
- (A) One (1) sand system with a maximum capacity of 70 tons of sand per hour, consisting of units identified as P32B, P33B, P34B, P35B, P36B, P37B and P39B, controlled by baghouse BH6400, and exhausting to stack 6400.

- (B) One (1) pouring station identified as P13B with a maximum capacity of 15 tons of metal poured per hour, controlled by dust collector DC3B, exhausting to stack 3.
  - (C) One (1) cooling line identified as P14B, with a maximum capacity of 15 tons of metal per hour, controlled by baghouse BH6200, exhausting to stack 6200.
  - (D) One (1) shakeout unit identified as P16B, with a maximum capacity of 15 tons of metal per hour, controlled by baghouse BH6200, exhausting to stack 6200.
  - (E) One (1) bad heat shakeout unit controlled by dust collector DC-5, exhausting to stack 5.
  - (F) Casting conveyors and desprue operations, identified as P17B, P18B, P19B, P20B, P21B, and P22B, with a maximum capacity of 15 tons of metal per hour, controlled by baghouses DC-7, and DC-8B, exhausting inside the building, and baghouse BH1-6200 exhausting to stack ID #1-6200.
  - (G) One (1) Plant 1, Line 2 shot blast process consisting of three shot blast units identified as P40, P41 and P42 each with a maximum capacity of 5.3 tons of metal per hour and with a combined maximum capacity for all three of 9.0 tons of metal per hour, controlled by dust collector DC-8B, exhausting inside the building.
- (3) One (1) shotblast unit, identified as Wheelabrator MeshBelt Blast, constructed in 2001, with a maximum capacity of 11.0 tons of metal per hour, with particulate matter emissions controlled by a baghouse DC-13 and exhausting internally.

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

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

#### **D.2.1 BACT for PM10 [326 IAC 2-2-3]**

- (a) Pursuant to 326 IAC 2-2-3, opacity for stacks Nos. 3A, 3B, 6200, 6400, and 5 shall not exceed ten percent (10%) for more than three (3) consecutive six (6) minute averaging periods.
- (b) The ladle heaters are exclusively natural gas fired and are therefore considered to meet the requirements for BACT.
- (c) Pursuant to 326 IAC 2-2-3, the Permittee shall comply with the following BACT required emission limits for PM10 from the Plant 1, Casting Line 2 processes (PM10 limits include both filterable and condensable).

| Stack No.               | Process   | Filterable PM10 Emission Limitation |         | Total PM10 Emission Limitation (lb/ton) (Filterable & Condensable) |
|-------------------------|---|-------------------------------------|---------|--|
|                         |   | (gr/dscf)                           | (lb/hr) |  |
| 3A                      | Melt (P8) & Metal Treatment (P11)   | 0.003                               | 1.7     | 0.633 lb/ton metal   |
| 3B                      | Pouring (P13B), Melt (P8) & Metal Treatment (P11)   | 0.003                               | 1.7     |  |
| 6400                    | Sand Handling (P32B-P37B & P39B)  | 0.003                               | 1.13    | 0.02 lb/ton sand   |
| 6200                    | Casting Cooling (P14B), Shakeout (P16B), Casting conveying (P17B, P18B, P19B, P20B, P21B, P22B) | 0.003                               | 2.85    | 1.045 lb/ton metal   |
| DC-8B (exhausts inside) | Shotblast (P40, P41, & P42) & Casting conveying (P17B, P18B, P19B, P20B, P21B, P22B)            | 0.003                               | 1.03    | 0.085 lb/ton metal   |
| DC-7 (exhausts inside)  | Casting conveying (P17B, P18B, P19B, P20B, P21B, P22B)  | 0.003                               | 0.55    | 0.085 lb/ton metal   |
| 5                       | Bad Heat Shakeout   | 0.003                               | 0.45    | 0.03 lb/ton metal  |

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

Emissions of PM and PM10 from the Charge Handling, Melting and Finishing operations constructed in 1988, shall be limited as follows:

- (a) Emissions of PM and PM10 from the charge handling operations (P1, P2, and P3) shall each not exceed 0.24 pound per hour.
- (b) Opacity from the charge handling operations (P1, P2, and P3) shall not exceed an average of three percent (3%) based on four (4) consecutive readings using 40 CFR 60, Appendix A, Method 9.
- (c) Emissions of PM and PM10 and the throughput of metal for Plant 1 Operations constructed in 1988, shall be limited as follows:

| Process              | Material        | PM/PM10 Emission Limitation (lb/ton material) | Throughput Limit of Material (Tons/12 consecutive month period) |
|----------------------|-----------------|---|---|
| Melting System (P8)  | Metal Poured    | 0.20  | 79,000  |
| Holding Furnace (P9) | Metal Poured    | 0.10  | 79,000  |
| Grinding (P29 – P30) | Metal Processed | 0.20  | 79,000  |

Compliance with the throughput limits shall be determined at the end of each month.

Compliance with these emission limits and the throughput limits combined with limited PM and PM10 emissions from the core sand handling operation listed in section D.1 limits PM and PM10 emissions from the Plant 1 Operations and core machines constructed in 1988 to less than 100 tons per year. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable.

**D.2.3 PSD Minor Limits for PM and PM10 [326 IAC 2-2]**

PM and PM10 emissions from the Wheelabrator MeshBelt Blast unit constructed in 2001 shall be limited as follows:

- (a) The PM emission rate shall not exceed 5.7 pounds per hour.
- (b) The PM10 emission shall not exceed 3.4 pounds per hour.

Compliance with these emission limits will limit PM and PM10 emissions from the Wheelabrator MeshBelt Blast to less than 25 and 15 tons per year, respectively. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable to the modification to construct this unit in 2001.

**D.2.4 PSD Minor Limits for PM [326 IAC 2-2]**

In order to render PSD not applicable for PM the following limits shall apply:

| Stack No. | Process   | PM Emission Limitation (lb/ton material) | Throughput Limit per 12 consecutive month period) |
|-----------|---|--|---|
| 3 A/B     | Melting System (P8), Metal Treatment (P11) and Pouring (P13B)   | 0.17 lbs/ton metal poured                | 79,000 tons metal poured                          |
| 6400      | Sand Handling (P32B-P37B & P39B)  | 0.016 lbs/ton sand                       | 368,667 tons sand processed                       |
| 6200      | Casting Cooling (P14B), Shakeout (P16B), Casting conveying and Desprue (P17B, P18B, P19B, P20B, P21B, P22B) | 0.19 lbs/ton metal poured                | 79,000 tons metal poured                          |
| 8B        | Shotblast (P40, P41, & P42), Casting Conveyor and Desprue (P17B, P18B, P19B, P20B, P21B and P22B).          | 0.11 lbs/ton metal poured                | 79,000 tons metal poured                          |
| 7         | Casting Conveyor and Desprue (P17B, P18B, P19B, P20B, P21B and P22B).                                       | 0.037 lbs/ton metal poured               | 79,000 tons metal poured                          |

Compliance with the throughput limits shall be determined at the end of each month.

Compliance with these limits along with the potential to emit from the ladle heaters limits PM emissions from all processes installed in 2004 to less than 25 tons/year. Therefore the requirements of 326 IAC 2-2 (PSD) do not apply to the modification in 2004 for PM emissions.

**D.2.5 Particulate [326 IAC 6-3-2]**

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rates from the Plant 1, Line 1 gray and ductile iron foundry line shall be limited as follows:

| Unit  | Stack ID            | Process Weight Rate<br>(ton per hour) | Allowable Emissions<br>(pounds per hour) |
|---|---------------------|---------------------------------------|--|
| Charge Handling (P1, P2, P3)  | N/A                 | 20.0                                  | 30.51                                    |
| Melting System – Electric Induction Furnace (P8), Holding Furnaces (P9), and 2 Metal Treatment Inoculation Ladles (P11) | 3A, 3B              | 20.0                                  | 30.51                                    |
| Sand Handling (P32B - P37B & P39B)  | 6400                | 70.0                                  | 47.76                                    |
| Pouring (P13B)*   | 3B                  | 85.0                                  | 49.67                                    |
| Casting Cooling (P14B)*   | 6200                | 85.0                                  | 49.67                                    |
| Shakeout (P16B)*  | 6200                | 85.0                                  | 49.67                                    |
| Bad Heat Shakeout*  | DC-5                | 85.0                                  | 49.67                                    |
| Casting Conveyors/ Desprue (P17B – P22B)  | 6200<br>DC-8B, DC-7 | 15.0                                  | 25.16                                    |
| Shotblast Operations (P40, P41 & P42)   | 8B                  | 9.0                                   | 17.87                                    |
| Grinding (P29 - P30)  | 8A                  | 12.0                                  | 21.67                                    |
| Wheelabrator MeshBelt Blast   | DC-13               | 11.0                                  | 20.44                                    |

\* Includes metal and sand throughput.

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

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

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

or

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

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

**D.2.6 Volatile Organic Compounds (VOC) [326 IAC 2-2-3][326 IAC 8-1-6]**

Pursuant to 326 IAC 2-2-3 (PSD) and 326 IAC 8-1-6 (BACT), the following conditions shall apply to the pouring station (P13B), cooling line (P14B), shakeout (P16B) and bad heat shakeout processes of Plant 1, Casting Line 2:

- (a) Material Substitution and Lower-Emitting Processes/Practices shall be used to limit VOC emissions.

- (b) VOC emissions shall not exceed 1.2 pounds per ton of metal throughput to the pouring station (P13B), cooling line (P14B), and shakeout operations (P16B) and bad heat shakeout operations combined.
- (c) The throughput of metal to the pouring, cooling and shakeout operations (P13B, P14B, and P16B) and bad heat shakeout operations combined shall not exceed 79,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (d) An Advanced Oxidation (AO) system with a minimum VOC reduction efficiency of 20% shall be installed.
- (e) The AO system shall be installed according to the following schedule:

|                                 |   |
|---------------------------------|---|
| Day 1:                          | Permit issuance.  |
| 30 days after permit issuance:  | INTAT will issue a purchase order for the AO system.  |
| 130 days after permit issuance: | Site delivery of AO system equipment.   |
| 160 days after permit issuance: | 90% of the installation will be complete. Remaining installation must be completed during Plant Shutdown.   |
| July, 2008 Plant Shutdown:      | AO system will be connected to INTAT's sand cooling and dust collection systems.  |
| 14 Days after Plant Shutdown:   | Begin Clearwater Phase (Normal tap water run through system to verify system integrity and no process issues).  |
| 35 Days after Plant Shutdown:   | Begin Clearwater Phase (Hydrogen peroxide slowly introduced to system, slow incremental changes made to sand system to accommodate peroxide effects). |
| 73 Days after Plant Shutdown:   | Start Blackwater Phase (Dust slowly introduced to AO system, slow incremental changes made to sand system to accommodate effects).                    |
| 101 Days after Plant Shutdown:  | Monitor system for stability issues, effects on part quality.   |
| 250 Days after Plant Shutdown:  | Stack testing will be completed.  |

D.2.7 CO Emissions PSD Minor Limit [326 IAC 2-2]

- (a) CO emissions from the pouring station (P13B), cooling line (P14B), shakeout (P16B) and bad heat shakeout operations combined shall not exceed 2.5 pounds of CO per ton of metal throughput;
- (b) The throughput of metal to each of the pouring station (P13B), cooling line (P14B), shakeout (P16B) and bad heat shakeout operations combined shall not exceed 79,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with the CO emission limit and the metal throughput limit will limit CO emissions from the units installed in 2004, including the ladle heaters, to less than 100 tons per year. Therefore, the requirements of 326 IAC 2-2 (PSD) do not apply for CO.

#### D.2.8 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B – Preventive Maintenance Plan, of this permit, is required for the facilities' control devices, including capture systems.

### Compliance Determination Requirements

#### D.2.9 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

- (a) In order to demonstrate compliance with Conditions D.2.1(c), D.2.2(c), D.2.3, D.2.4 and D.2.5 the Permittee shall perform PM and PM10 testing for the following facilities utilizing methods as approved by the Commissioner.
- (1) Dust Collector DC-3A/B controlling the melt furnaces, metal treatment stations and pouring operations.
  - (2) Baghouse BH-6400 controlling the sand handling system.
  - (3) Baghouse BH-6200 controlling the cooling operation (P14B), the shakeout process (P16B), the casting conveyors and the desprue operation.
  - (4) Cartridge collector DC-8B controlling the shotblast, casting conveyors and desprue operations.
  - (5) Cartridge Collector DC-7 controlling the casting conveyor and desprue operations.
  - (6) Cartridge collector DC-8A controlling the grinding operation.
- (b) Within 250 days after the July, 2008 plant shutdown, in order to demonstrate compliance with Conditions D.2.6(b) and D.2.7(a), the Permittee shall perform VOC and CO testing for the pouring station (P13B), cooling line (P14B), and shakeout (P16B) operations. utilizing methods as approved by the Commissioner.
- (c) The tests required in (a) and (b) above shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM10 includes filterable and condensable PM10. Testing shall be conducted in accordance with Section C – Performance Testing.

#### D.2.10 Particulate Control [326 IAC 2-7-6(6)]

- (a) In order to comply with conditions D.2.1, D.2.2, D.2.3, D.2.4, and D.2.5 the baghouses and cartridge collectors for particulate control shall be in operation and control emissions from the melting, inoculation, pouring, cooling, shakeout, casting conveying, desprue, shotblasting, and grinding, processes at all times that these facilities are in operation.
- (b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

#### D.2.11 VOC Control [326 IAC 2-2-3] [326 IAC 8-1-6]

---

In order to comply with Condition D.2.6, within twelve (12) months after the July, 2008 plant shutdown when the AO system is to be installed, the AO system shall be in operation and control VOC emissions from the pouring station (P13B), cooling line (P14B), shakeout (P16B) and bad heat shakeout processes at all times these processes are in operation.

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

#### D.2.12 Visible Emissions Notations

---

- (a) Visible emission notations of the charge handling operation and the stack exhausts 3, 6200, 6400, 5, and 8A for the melting, inoculation, pouring, cooling, shakeout, casting conveying, desprue, shotblasting, and grinding processes shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable steps in accordance with Section C – Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C – Response to Excursions or Exceedances shall be considered a deviation from this permit.

#### D.2.13 Parametric Monitoring

---

The Permittee shall record the pressure drop across each of the baghouses BH-6200 and BH-6400 and cartridge collectors DC-3A/DC-3B, DC-7, DC-8A, DC-8B, DC-5, and DC13 used in conjunction with the melting, inoculation, pouring, cooling, shakeout, casting conveying, desprue, shotblasting, grinding, bad heat shakeout, and Wheelabrator MeshBelt Blast processes, at least once per day when the melting, inoculation, pouring, cooling, shakeout, casting conveying, desprue, shotblasting, grinding, bad heat shakeout, and Wheelabrator MeshBelt Blast processes are in operation. When for any one reading, the pressure drop across any of the cartridge collectors is outside the normal range of 0.5 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C – Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C – Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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

#### D.2.14 Broken or Failed Baghouse and Cartridge Collector Detection

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

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

#### D.2.15 Parametric Monitoring of Advanced Oxidation (AO) System

- (a) Upon commencing initial operation of the AO system or equivalent system, the Permittee shall monitor and record the ultra-sonic power of the AO system or equivalent system used in conjunction with the pouring station (P13B), cooling line (P14B), shakeout (P16B) and bad heat shakeout processes, at least once per day when the pouring station (P13B), cooling line (P14B), shakeout (P16B) and bad heat shakeout processes are in operation. When for any one reading, the ultra-sonic power is less than 1100 W or a minimum established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. An ultra-sonic power reading that is below the above mentioned minimum is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.
- (b) Upon commencing initial operation of the AO system or equivalent system, the Permittee shall monitor and record the ozone generator plasma voltage of the AO system or equivalent system used in conjunction with the pouring station (P13B), cooling line (P14B), shakeout (P16B) and bad heat shakeout processes, at least once per day when the pouring station (P13B), cooling line (P14B), shakeout (P16B) and bad heat shakeout processes are in operation. When for any one reading, the ozone generator plasma voltage is less than 2400 V or a minimum established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. An ozone generator plasma voltage reading that is below the above mentioned minimum is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

- (c) Upon commencing initial operation of the AO system or equivalent system, the Permittee shall monitor and record the hydrogen peroxide usage of the AO system or equivalent system used in conjunction with the pouring station (P13B), cooling line (P14B), shakeout (P16B) and bad heat shakeout processes, at least once per day when the pouring station (P13B), cooling line (P14B), shakeout (P16B) and bad heat shakeout processes are in operation. When for any one reading, the hydrogen peroxide is less than 1 gallon per hour of muller operation, or a minimum established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A peroxide usage reading that is below the above mentioned minimum is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

The instruments used for determining the ultra-sonic power, the ozone generator plasma voltage and the hydrogen peroxide usage shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

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

#### **D.2.16 Record Keeping Requirements**

- 
- (a) To document compliance with Conditions D.2.2(c) and D.2.4, D.2.6(c) and D.2.7(b), the Permittee shall maintain records of the tons of metal poured on Casting Line 2 operations per month, with compliance determined at the end of each month.
- (b) To document compliance with Condition D.2.4, the Permittee shall maintain records of the tons of mold sand processed on Casting Line 2 operations per month, with compliance determined at the end of each month.
- (c) To document compliance with Condition D.2.2(c), the Permittee shall maintain records of the tons of metal throughput to the grinding processes P29 and P30 per month, with compliance determined at the end of each month.
- (d) To document compliance with Condition D.2.9, the Permittee shall maintain records of visible emission notations of the stack exhausts from stacks 3, 6200, 6400, 5 and 8A once per day. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).
- (e) To document compliance with Condition D.2.10, the Permittee shall maintain once per day records of the pressure drop. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).
- (f) To document compliance with Condition D.2.12, the Permittee shall maintain records of the ultra-sonic power, the ozone generator plasma voltage, and the hydrogen peroxide usage of the AO system.
- (g) All records shall be maintained in accordance with Section C- General Record Keeping Requirements, of this permit.

#### D.2.17 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.2.2(c), D.2.4, D.2.6(c) and D.2.7(b) shall be submitted to the address listed in Section C – General Reporting Requirements of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

### SECTION D.3

### FACILITY OPERATION CONDITIONS

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

- (d) Plant 2, one (1) ductile iron foundry line, constructed in 1997, consisting of the following:
- (1) One (1) indoor charge handling system, identified as ID #1000A, with a maximum capacity of 10 tons of metal per hour;
  - (2) One (1) melting, inoculation and pouring system, identified as ID #1110, 1150 and 2000, respectively, with a maximum capacity of 10 tons of metal per hour, utilizing a baghouse (ID # BH6010) for particulate control, exhausting to stack ID #6010, consisting of the following equipment:
    - (A) Two (2) electric induction furnaces, each with a maximum capacity of 10 tons of metal per hour;
    - (B) One (1) electric holding furnace (uncontrolled);
    - (C) Two (2) natural gas-fired ladle heaters, identified as ID #6600 and 6610, each with a maximum heat input rate of 2 MMBtu per hour;

Note: The maximum throughput of metal for the melting and pouring system is limited to 10 tons of metal per hour by the maximum throughput from the charge handling system of 10 tons of metal per hour and the power control systems at the plant.
  - (3) One (1) mold machine, identified as ID #2010, with a maximum capacity of 10 tons of metal per hour and 70 tons of sand per hour, utilizing one (1) baghouse (ID # BH6010) for particulate control, exhausting to stack ID#6010;
  - (4) One (1) casting cooling and conveyor system, identified as #2015 and 2020, respectively, with a maximum capacity of 10 tons of metal per hour and 70 tons of sand per hour, utilizing two (2) baghouses (ID # BH6020 and 6030) for particulate control exhausting to stack ID#s 6020 and 6030A and 6030B;
  - (5) One (1) casting shakeout system, identified as ID #3010, with a maximum capacity of 10 tons of metal per hour and 70 tons of sand per hour, utilizing one (1) baghouse (ID #BH6030) for particulate control, exhausting to stack ID#s 6030A and 6030B;
  - (6) One (1) sand and waste sand handling system, identified as ID #4000, #4140, and 5000, with a maximum capacity of 70 tons of sand per hour, utilizing two (2) baghouses (BH6020 and 6040) for particulate control, exhausting to stack ID #s 6020 and 6040;
  - (7) Two (2) shot blast units, identified as Pre-Blast ID #3055 and Final Blast ID #3090, each with a maximum capacity of 10 tons of metal per hour, utilizing one (1) baghouse (BH #6030) for particulate control, exhausting to stack ID # 6030A and 6030B;
  - (8) One (1) finishing operation, identified as ID #8000, with a maximum capacity of 5.5 tons of metal per hour, consisting of trim presses, uncontrolled.

**Insignificant Activities:**

(i)(1) Six (6) bench grinders, identified as ID #8000, with maximum capacity of 5.5 tons of metal per hour, utilizing fabric filters (FFA, FFB, FFC, FFD, and FFE) for control; four (4) grinders each controlled by one fabric filter, and two (2) grinders controlled by one (1) fabric filter, all exhausting inside the building. [326 IAC 6-3-2]

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

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

**D.3.1 PSD Minor Limit [326 IAC 2-2]**

The charge handling operation (1000A) shall comply with the following limits:

- (a) Emissions of PM and PM10 shall each not exceed 0.12 pound per hour.
- (b) Opacity shall not exceed an average of three percent (3%) based on four (4) consecutive readings using 40 CFR 60, Appendix A, Method 9.

This emission limit, in addition to the emission limits listed in condition D.3.2, yield PM and PM10 emissions from the Plant 2, ductile iron foundry line, constructed in 1997, that are each less than 100 tons per year. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable.

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

Emissions of PM and PM10 and the throughput of metal and sand for the Plant 2, ductile iron foundry line, constructed in 1997, shall be limited as follows:

| Process  | Control Device ID | PM/PM10 Emission Limitation (lb/ton material) | Throughput Limit of Material (tons per 12 consecutive month period) |
|--|-------------------|---|---|
| Melting, Pouring and Inoculation (1110, 2000, and 1150)  | 6010              | 0.50  | 61,500 (metal)  |
| Holding Furnace  | NA                | 0.10  | 61,500 (metal)  |
| Casting Cooling and conveyor system (2015 and 2020)      | 6020, 6030        | 1.45 (for control device 6030)                | 61,500 (metal)  |
| Shakeout (3010)  | 6030              |   |   |
| Pre-Blast (3055) and Final Blast (3090)                  | 6030              |   |   |
| Sand & Waste Sand Handling System (4000, 4140, and 5000) | 6020, 6040        | 0.11 (for control device 6020)                | 430,500 (mold sand)   |
|  |                   | 0.05 (for control device 6040)                |   |
| Grinding/Cleaning (8000)                                 | FFA - FFE         | 0.06  | 48,180 (metal)  |

Compliance with the throughput limits shall be determined at the end of each month.

These emission limits and the throughput limits, combined with limited PM and PM10 emissions from the charge handling operation (1000A), yield PM and PM10 emissions from the Plant 2, ductile iron foundry line constructed in 1997 that are each less than 100 tons per year. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable. Any emissions from the electric holding furnace are accounted for in the emissions from melting in the electric induction furnaces.

**D.3.3 Particulate [326 IAC 6-3-2]**

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rates from the Plant 2, ductile iron foundry line shall be limited as follows:

| Unit  | Control Device ID | Process Weight Rate (ton per hour) | Allowable Emissions (pounds per hour) |
|---|-------------------|------------------------------------|---------------------------------------|
| Charge Handling (1000A)                                 | NA                | 10.0                               | 19.18                                 |
| Melting, Pouring and Inoculation (1110, 2000, and 1150) | 6010              | 10.0                               | 19.18                                 |
| Holding Furnace   | Uncontrolled      | 10.0                               | 19.18                                 |
| Casting Cooling and conveyor system (2015 and 2020)*    | 6020, 6030        | 80.0                               | 49.06                                 |
| Casting Shakeout (3010)*                                | 6030              | 80.0                               | 49.06                                 |
| Pre-Blast (3055)  | 6030              | 10.0                               | 19.18                                 |
| Final Blast (3090)                                      | 6030              | 10.0                               | 19.18                                 |
| Sand & Waste Sand Handling (4000, 4140, and 5000)       | 6020, 6040        | 70.0                               | 47.77                                 |
| Grinding/Cleaning (8000)                                | FFA - FFE         | 5.50                               | 12.85                                 |

\* Includes metal and sand throughput.

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

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

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

or

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

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

**D.3.4 Volatile Organic Compounds (VOC)[326 IAC 2-2-3] [326 IAC 8-1-6]**

- (a) VOC emissions from the melting operation (1110), inoculation operation (1150), pouring operation (2000), the casting cooling/conveyor system (2015 and 2020), and the casting shakeout system (3010) combined shall not exceed 0.8 pound of VOC per ton of metal throughput;

- (b) The throughput of metal to each of the melting operation (1110), inoculation operation (1150), pouring operation (2000), the casting cooling/conveyor system (2015 and 2020), and the casting shakeout system (3010) shall not exceed 61,500 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

The metal throughput limit and the VOC emission limits yield VOC emissions from the Plant 2, ductile iron foundry line constructed in 1997 that are less than 25 tons per year. Therefore, the requirements of 326 IAC 8-1-6 (New Facilities, General Reduction Requirements) do not apply.

#### D.3.5 CO Emissions PSD Minor Limit [326 IAC 2-2]

- (a) CO emissions from the pouring operation (2000), the casting cooling and conveyor system (2015 and 2020), and the casting shakeout system (3010) combined shall not exceed 3.2 pounds of CO per ton of metal throughput;
- (b) The throughput of metal to each of the pouring operation (2000), the casting cooling and conveyor system (2015 and 2020), and the casting shakeout system (3010) combined shall not exceed 61,500 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with the CO emission limit and the metal throughput limit will limit CO emissions from the Plant 2, ductile iron foundry line constructed in 1997, including the ladle heaters, to less than 100 tons per year. Therefore, the requirements of 326 IAC 2-2 (PSD) do not apply for CO.

#### D.3.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

### **Compliance Determination Requirements**

#### D.3.7 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

- (a) In order to demonstrate compliance with Conditions D.3.2, and D.3.3, the Permittee shall perform PM, and PM-10 for the following facilities utilizing methods as approved by the Commissioner:
  - (1) the baghouse controlling the melting, pouring and inoculation operations (1110, 2000, and 1150) exhausting to stack 6010;
  - (2) the baghouses controlling the casting cooling and conveyor system (2015 and 2020) exhausting to stacks 6020, 6030A and 6030B;
  - (3) the baghouse controlling the shakeout operation (3010) exhausting to stacks 6030A and 6030B;
  - (4) the baghouses controlling the sand and waste sand handling system (4000, 4140, and 5000) exhausting to stacks 6020 and 6040 (PM and PM10 testing only); and
  - (5) the one (1) fabric filter controlling two (2) bench grinders, exhausting to the room.

These tests shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration. PM-10 includes filterable and condensable PM-10. Testing shall be conducted in accordance with Section C - Performance Testing.

- (b) In order to demonstrate compliance with Condition D.3.4, the Permittee shall perform VOC testing for the melting operation (1110), inoculation operation (1150), pouring operation (2000), the casting cooling and conveyor system (2015 and 2020), and the casting shakeout system (3010) utilizing methods as approved by the Commissioner. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.
- (c) In order to demonstrate compliance with Condition D.3.5, the Permittee shall perform CO testing for the pouring operation (2000), the casting cooling and conveyor system (2015 and 2020), and the casting shakeout system (3010) utilizing methods as approved by the Commissioner. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

#### D.3.8 Particulate Control [326 IAC 2-7-6(6)]

---

- (a) Pursuant to CP-139-8845-00011, issued on December 10, 1997, and in order to comply with Conditions D.3.2 and D.3.3, the baghouses and fabric filters for particulate and metallic HAP control shall be in operation and control emissions from the melting, pouring, inoculation, cooling, shakeout, sand handling, waste sand handling, and grinding/cleaning processes and the pre-blast and final blast shot blast machines at all times that these facilities are in operation.
- (b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

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

#### D.3.9 Visible Emissions Notations

---

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

#### D.3.10 Parametric Monitoring

---

The Permittee shall record the pressure drop across each of the baghouses used in conjunction with the melting, pouring, inoculation, cooling, shakeout, sand handling, waste sand handling, and grinding/cleaning processes and the pre-blast and final blast shot blast machines, at least once per day when the melting, pouring, inoculation, cooling, shakeout, sand handling, waste sand handling, and grinding/cleaning processes and the pre-blast and final blast shot blast machines are in operation. When for any one reading, the pressure drop across any of the baghouses is outside the normal range of 0.5 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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

#### D.3.11 Broken or Failed Bag and Cartridge Collector Detection

---

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

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

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

#### D.3.12 Record Keeping Requirements

---

- (a) To document compliance with Conditions D.3.2, D.3.4, and D.3.5, the Permittee shall maintain records of the monthly metal throughput to the Melting, Pouring and Inoculation operations (1110, 2000, and 1150), the holding furnace, Casting Cooling and Conveyor system (2015 and 2020), the casting shakeout system (3010), the Pre-Blast (3055) and Final Blast (3090), and the grinding/cleaning process (8000).
- (b) To document compliance with Condition D.3.2, the Permittee shall maintain records of the monthly sand throughput to the Sand & Waste Sand Handling System (4000, 4140, and 5000).

- (c) To document compliance with Condition D.3.9, the Permittee shall maintain records of visible emission notations of the charge handling operation and the stack exhausts for the melting, pouring, inoculation, cooling, shakeout, sand handling, waste sand handling, and grinding/cleaning processes and the pre-blast and final blast shot blast machines taken once per day. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).
- (d) To document compliance with Condition D.3.10, the Permittee shall maintain once per day records of the pressure drop. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

#### D.3.13 Reporting Requirements

---

A quarterly summary of the information to document compliance with Conditions D.3.2, D.3.4, and D.3.5 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

## SECTION D.4

## FACILITY CONDITIONS

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

#### Insignificant Activities:

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units (Btu) per hour;
  - (1) Two (2) boilers, identified as P40 and P41, with a maximum heat capacity of 0.9 and 1.2 million British units per hour, respectively, each combusting natural gas; [326 IAC 6-2-4]
- (b) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6 (Maintenance parts cleaner using mineral spirits solvent that is 100% recycled, with a maximum throughput of 120 gallons per 12 months); [326 IAC 8-3-2]
- (c) Other activities or categories not previously identified:
  - (1) One (1) paint booth, identified as CO5, used for machine part maintenance coating operations, with a maximum throughput rate of 120 metal units per hour, utilizing dry filters for particulate control, exhausting inside the building or through stack No. S-CO5. [326 IAC 6-3-2][40 CFR 63, Subpart Mmmm]
  - (2) All storage containers and mixing vessels in which coatings, thinners and/or other additives, and cleaning materials are stored or mixed; [40 CFR 63, Subpart Mmmm]
  - (3) All manual and automated equipment and containers used for conveying coatings, thinners and/or other additives, and cleaning materials; [40 CFR 63, Subpart Mmmm] and
  - (4) All storage containers and all manual and automated equipment and containers used for conveying waste materials generated by a coating operation. [40 CFR 63, Subpart Mmmm]

Under the Surface Coating of Miscellaneous Metal Parts and Products NESHAP (40 CFR 63, Subpart Mmmm), the one (1) paint booth, identified as CO5, is considered an existing affected source.

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

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

#### D.4.1 Particulate Matter (PM) [326 IAC 6-2]

Pursuant to 326 IAC 6-2-4(a) (Particulate Emission Limitations for Sources of Indirect Heating), for Q less than 10 MMBtu per hour, the pounds of PM emitted per million Btu heat input shall not exceed 0.6 pound per MMBtu. Therefore, PM emissions from each of the boilers, identified as P40 and P41, shall not exceed 0.6 pound per MMBtu heat input.

#### D.4.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

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

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;

- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

**D.4.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]**

---

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the one (1) paint booth and its control device.

**D.4.4 Particulate [326 IAC 6-3-2(d)]**

---

Pursuant to 326 IAC 6-3-2(d), particulate from the one (1) paint booth, identified as # CO5, shall be controlled by a dry particulate filter, and the Permittee shall operate the control device in accordance with manufacturer's specifications.

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

**D.4.5 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants under 40 CFR Part 63 [326 IAC 20-1] [40 CFR Part 63, Subpart A]**

---

- (a) Pursuant to 40 CFR 63.3901, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1-1 for:
  - (1) One (1) paint booth, identified as CO5, used for machine part maintenance coating operations, with a maximum throughput rate of 120 metal units per hour, utilizing dry filters for particulate control, exhausting inside the building or through stack No. S-CO5;
  - (2) All storage containers and mixing vessels in which coatings, thinners and/or other additives, and cleaning materials are stored or mixed;
  - (3) All manual and automated equipment and containers used for conveying coatings, thinners and/or other additives, and cleaning materials; and
  - (4) All storage containers and all manual and automated equipment and containers used for conveying waste materials generated by a coating operation,

as specified in Table 2 of 40 CFR 63, Subpart M in accordance with schedule in 40 CFR 63 Subpart M.

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

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

**D.4.6 Surface Coating of Miscellaneous Metal Parts and Products NESHAP Requirements [40 CFR Part 63, Subpart M] [326 IAC 20-80]**

---

Pursuant to CFR Part 63, Subpart M, the Permittee shall comply with the provisions of the Surface Coating of Miscellaneous Metal Parts and Products NESHAP, which are incorporated by reference as 326 IAC 20-80 for:

- (1) One (1) paint booth, identified as CO5, used for machine part maintenance coating operations, with a maximum throughput rate of 120 metal units per hour, utilizing dry filters for particulate control, exhausting inside the building or through stack No. S-CO5;
- (2) All storage containers and mixing vessels in which coatings, thinners and/or other additives, and cleaning materials are stored or mixed;
- (3) All manual and automated equipment and containers used for conveying coatings, thinners and/or other additives, and cleaning materials; and
- (4) All storage containers and all manual and automated equipment and containers used for conveying waste materials generated by a coating operation,

as specified as follows.

### **What This Subpart Covers**

#### **§ 63.3880 What is the purpose of this subpart?**

This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for miscellaneous metal parts and products surface coating facilities. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations.

#### **§ 63.3881 Am I subject to this subpart?**

(a) Miscellaneous metal parts and products include, but are not limited to, metal components of the following types of products as well as the products themselves: motor vehicle parts and accessories, bicycles and sporting goods, recreational vehicles, extruded aluminum structural components, railroad cars, heavy duty trucks, medical equipment, lawn and garden equipment, electronic equipment, magnet wire, steel drums, industrial machinery, metal pipes, and numerous other industrial, household, and consumer products. Except as provided in paragraph (c) of this section, the source category to which this subpart applies is the surface coating of any miscellaneous metal parts or products, as described in paragraph (a)(1) of this section, and it includes the subcategories listed in paragraphs (a)(2) through (6) of this section.

(1) Surface coating is the application of coating to a substrate using, for example, spray guns or dip tanks. When application of coating to a substrate occurs, then surface coating also includes associated activities, such as surface preparation, cleaning, mixing, and storage. However, these activities do not comprise surface coating if they are not directly related to the application of the coating. Coating application with handheld, non-refillable aerosol containers, touch-up markers, marking pens, or the application of paper film or plastic film which may be pre-coated with an adhesive by the manufacturer are not coating operations for the purposes of this subpart.

(2) The general use coating subcategory includes all surface coating operations that are not high performance, magnet wire, rubber-to-metal, or extreme performance fluoropolymer coating operations.

(3) The high performance coating subcategory includes surface coating operations that are performed using coatings that meet the definition of high performance architectural coating or high temperature coating in §63.3981.

(4) The magnet wire coating subcategory includes surface coating operations that are performed using coatings that meet the definition of magnet wire coatings in §63.3981.

(5) The rubber-to-metal coatings subcategory includes surface coating operations that are performed using coatings that meet the definition of rubber-to-metal coatings in §63.3981.

(6) The extreme performance fluoropolymer coatings subcategory includes surface coating operations that are performed using coatings that meet the definition of extreme performance fluoropolymer coatings in §63.3981.

(b) You are subject to this subpart if you own or operate a new, reconstructed, or existing affected source, as defined in §63.3882, that uses 946 liters (250 gallons (gal)) per year, or more, of coatings that contain hazardous air pollutants (HAP) in the surface coating of miscellaneous metal parts and products defined in paragraph (a) of this section; and that is a major source, is located at a major source, or is part of a major source of emissions of HAP. A major source of HAP emissions is any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit any single HAP at a rate of 9.07 megagrams (Mg) (10 tons) or more per year or any combination of HAP at a rate of 22.68 Mg (25 tons) or more per year. You do not need to include coatings that meet the definition of non-HAP coating contained in §63.3981 in determining whether you use 946 liters (250 gal) per year, or more, of coatings in the surface coating of miscellaneous metal parts and products.

**§ 63.3882 What parts of my plant does this subpart cover?**

(a) This subpart applies to each new, reconstructed, and existing affected source within each of the four subcategories listed in §63.3881(a).

(b) The affected source is the collection of all of the items listed in paragraphs (b)(1) through (4) of this section that are used for surface coating of miscellaneous metal parts and products within each subcategory.

(1) All coating operations as defined in §63.3981;

(2) All storage containers and mixing vessels in which coatings, thinners and/or other additives, and cleaning materials are stored or mixed;

(3) All manual and automated equipment and containers used for conveying coatings, thinners and/or other additives, and cleaning materials; and

(4) All storage containers and all manual and automated equipment and containers used for conveying waste materials generated by a coating operation.

(e) An affected source is existing if it is not new or reconstructed.

**§ 63.3883 When do I have to comply with this subpart?**

The date by which you must comply with this subpart is called the compliance date. The compliance date for each type of affected source is specified in paragraphs (a) through (c) of this section. The compliance date begins the initial compliance period during which you conduct the initial compliance demonstration described in §§63.3940, 63.3950, and 63.3960.

(b) For an existing affected source, the compliance date is the date 3 years after January 2, 2004.

(d) You must meet the notification requirements in §63.3910 according to the dates specified in that section and in subpart A of this part. Some of the notifications must be submitted before the compliance dates described in paragraphs (a) through (c) of this section.

**Emission Limitations**

**§ 63.3890 What emission limits must I meet?**

(b) For an existing affected source, you must limit organic HAP emissions to the atmosphere from the affected source to the applicable limit specified in paragraphs (b)(1) through (5) of this section, except as specified in paragraph (c) of this section, determined according to the requirements in §63.3941, §63.3951, or §63.3961.

(1) For each existing general use coating affected source, limit organic HAP emissions to no more than 0.31 kg (2.6 lb) organic HAP per liter (gal) coating solids used during each 12-month compliance period.

**§ 63.3891 What are my options for meeting the emission limits?**

You must include all coatings (as defined in §63.3981), thinners and/or other additives, and cleaning materials used in the affected source when determining whether the organic HAP emission rate is equal to or less than the applicable emission limit in §63.3890. To make this determination, you must use at least one of the three compliance options listed in paragraphs (a) through (c) of this section. You may apply any of the compliance options to an individual coating operation, or to multiple coating operations as a group, or to the entire affected source. You may use different compliance options for different coating operations, or at different times on the same coating operation. You may employ different compliance options when different coatings are applied to the same part, or when the same coating is applied to different parts. However, you may not use different compliance options at the same time on the same coating operation. If you switch between compliance options for any coating operation or group of coating operations, you must document this switch as required by §63.3930(c), and you must report it in the next semiannual compliance report required in §63.3920.

(a) *Compliant material option.* Demonstrate that the organic HAP content of each coating used in the coating operation(s) is less than or equal to the applicable emission limit in §63.3890, and that each thinner and/or other additive, and cleaning material used contains no organic HAP. You must meet all the requirements of §§63.3940, 63.3941, and 63.3942 to demonstrate compliance with the applicable emission limit using this option.

**§ 63.3892 What operating limits must I meet?**

(a) For any coating operation(s) on which you use the compliant material option or the emission rate without add-on controls option, you are not required to meet any operating limits.

**§ 63.3893 What work practice standards must I meet?**

(a) For any coating operation(s) on which you use the compliant material option or the emission rate without add-on controls option, you are not required to meet any work practice standards.

**General Compliance Requirements**

**§ 63.3900 What are my general requirements for complying with this subpart?**

(a) You must be in compliance with the emission limitations in this subpart as specified in paragraphs (a)(1) and (2) of this section.

(1) Any coating operation(s) for which you use the compliant material option or the emission rate without add-on controls option, as specified in §63.3891(a) and (b), must be in compliance with the applicable emission limit in §63.3890 at all times.

(b) You must always operate and maintain your affected source, including all air pollution control and monitoring equipment you use for purposes of complying with this subpart, according to the provisions in §63.6(e)(1)(i).

**§ 63.3901 What parts of the General Provisions apply to me?**

Table 2 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you.

**Notifications, Reports, and Records**

**§ 63.3910 What notifications must I submit?**

(a) *General.* You must submit the notifications in §§63.7(b) and (c), 63.8(f)(4), and 63.9(b) through (e) and (h) that apply to you by the dates specified in those sections, except as provided in paragraphs (b) and (c) of this section.

(b) *Initial Notification.* You must submit the initial notification required by §63.9(b) for a new or reconstructed affected source no later than 120 days after initial startup or 120 days after January 2, 2004, whichever is later. For an existing affected source, you must submit the initial notification no later than 1 year after January 2, 2004. If you are using compliance with the Surface Coating of Automobiles and Light-Duty Trucks NESHAP (subpart IIII of this part) as provided for under §63.3881(d) to constitute compliance with this subpart for any or all of your metal parts coating operations, then you must include a statement to this effect in your initial notification, and no other notifications are required under this subpart in regard to those metal parts coating operations. If you are complying with another NESHAP that constitutes the predominant activity at your facility under §63.3881(e)(2) to constitute compliance with this subpart for your metal parts coating operations, then you must include a statement to this effect in your initial notification, and no other notifications are required under this subpart in regard to those metal parts coating operations.

(c) *Notification of compliance status.* You must submit the notification of compliance status required by §63.9(h) no later than 30 calendar days following the end of the initial compliance period described in §§63.3940, 63.3950, or 63.3960 that applies to your affected source. The notification of compliance status must contain the information specified in paragraphs (c)(1) through (11) of this section and in §63.9(h).

(1) Company name and address.

(2) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

(3) Date of the report and beginning and ending dates of the reporting period. The reporting period is the initial compliance period described in §§63.3940, 63.3950, or 63.3960 that applies to your affected source.

(4) Identification of the compliance option or options specified in §63.3891 that you used on each coating operation in the affected source during the initial compliance period.

(5) Statement of whether or not the affected source achieved the emission limitations for the initial compliance period.

(6) If you had a deviation, include the information in paragraphs (c)(6)(i) and (ii) of this section.

(i) A description and statement of the cause of the deviation.

(ii) If you failed to meet the applicable emission limit in §63.3890, include all the calculations you used to determine the kg (lb) of organic HAP emitted per liter (gal) coating solids used. You do not need to submit information provided by the materials' suppliers or manufacturers, or test reports.

(7) For each of the data items listed in paragraphs (c)(7)(i) through (iv) of this section that is required by the compliance option(s) you used to demonstrate compliance with the emission limit, include an example of how you determined the value, including calculations and supporting data. Supporting data may include a copy of the information provided by the supplier or manufacturer of the example coating or material, or a summary of the results of testing conducted according to §63.3941(a), (b), or (c). You do not need to submit copies of any test reports.

(i) Mass fraction of organic HAP for one coating, for one thinner and/or other additive, and for one cleaning material.

(ii) Volume fraction of coating solids for one coating.

(iii) Density for one coating, one thinner and/or other additive, and one leaning material, except that if you use the compliant material option, only the example coating density is required.

(iv) The amount of waste materials and the mass of organic HAP contained in the waste materials for which you are claiming an allowance in Equation 1 of §63.3951.

(8) The calculation of kg (lb) of organic HAP emitted per liter (gal) coating solids used for the compliance option(s) you used, as specified in paragraphs (c)(8)(i) through (iii) of this section.

(i) For the compliant material option, provide an example calculation of the organic HAP content for one coating, using Equation 2 of §63.3941.

#### **§ 63.3920 What reports must I submit?**

(a) *Semiannual compliance reports.* You must submit semiannual compliance reports for each affected source according to the requirements of paragraphs (a)(1) through (7) of this section. The semiannual compliance reporting requirements may be satisfied by reports required under other parts of the Clean Air Act (CAA), as specified in paragraph (a)(2) of this section.

- (1) *Dates.* Unless the Administrator has approved or agreed to a different schedule for submission of reports under §63.10(a), you must prepare and submit each semiannual compliance report according to the dates specified in paragraphs (a)(1)(i) through (iv) of this section. Note that the information reported for each of the months in the reporting period will be based on the last 12 months of data prior to the date of each monthly calculation.
- (i) The first semiannual compliance report must cover the first semiannual reporting period which begins the day after the end of the initial compliance period described in §63.3940, §63.3950, or §63.3960 that applies to your affected source and ends on June 30 or December 31, whichever date is the first date following the end of the initial compliance period.
- (ii) Each subsequent semiannual compliance report must cover the subsequent semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.
- (iii) Each semiannual compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.
- (iv) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the date specified in paragraph (a)(1)(iii) of this section.
- (2) *Inclusion with title V report.* Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 40 CFR part 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a semiannual compliance report pursuant to this section along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the semiannual compliance report includes all required information concerning deviations from any emission limitation in this subpart, its submission will be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a semiannual compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permitting authority.
- (3) *General requirements.* The semiannual compliance report must contain the information specified in paragraphs (a)(3)(i) through (vii) of this section, and the information specified in paragraphs (a)(4) through (7) and (c)(1) of this section that is applicable to your affected source.
- (i) Company name and address.
- (ii) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
- (iii) Date of report and beginning and ending dates of the reporting period. The reporting period is the 6-month period ending on June 30 or December 31. Note that the information reported for each of the 6 months in the reporting period will be based on the last 12 months of data prior to the date of each monthly calculation.
- (iv) Identification of the compliance option or options specified in §63.3891 that you used on each coating operation during the reporting period. If you switched between compliance options during the reporting period, you must report the beginning and ending dates for each option you used.
- (4) *No deviations.* If there were no deviations from the emission limitations in §§63.3890, 63.3892, and 63.3893 that apply to you, the semiannual compliance report must include a statement that there were no deviations from the emission limitations during the reporting period. If you used the emission rate with add-on controls option and there were no periods during which the continuous parameter monitoring systems (CPMS) were out-of-control as specified in §63.8(c)(7), the semiannual compliance report must include a statement that there were no periods during which the CPMS were out-of-control during the reporting period.
- (5) *Deviations: Compliant material option.* If you used the compliant material option and there was a deviation from the applicable organic HAP content requirements in §63.3890, the semiannual compliance report must contain the information in paragraphs (a)(5)(i) through (iv) of this section.
- (i) Identification of each coating used that deviated from the applicable emission limit, and each thinner and/or other additive, and cleaning material used that contained organic HAP, and the dates and time periods each was used.

(ii) The calculation of the organic HAP content (using Equation 2 of §63.3941) for each coating identified in paragraph (a)(5)(i) of this section. You do not need to submit background data supporting this calculation ( e.g., information provided by coating suppliers or manufacturers, or test reports).

(iii) The determination of mass fraction of organic HAP for each thinner and/or other additive, and cleaning material identified in paragraph (a)(5)(i) of this section. You do not need to submit background data supporting this calculation ( e.g., information provided by material suppliers or manufacturers, or test reports).

(iv) A statement of the cause of each deviation.

#### **§ 63.3930 What records must I keep?**

You must collect and keep records of the data and information specified in this section. Failure to collect and keep these records is a deviation from the applicable standard.

(a) A copy of each notification and report that you submitted to comply with this subpart, and the documentation supporting each notification and report. If you are using the predominant activity alternative under §63.3890(c), you must keep records of the data and calculations used to determine the predominant activity. If you are using the facility-specific emission limit alternative under §63.3890(c), you must keep records of the data used to calculate the facility-specific emission limit for the initial compliance demonstration. You must also keep records of any data used in each annual predominant activity determination and in the calculation of the facility-specific emission limit for each 12-month compliance period included in the semi-annual compliance reports.

(b) A current copy of information provided by materials suppliers or manufacturers, such as manufacturer's formulation data, or test data used to determine the mass fraction of organic HAP and density for each coating, thinner and/or other additive, and cleaning material, and the volume fraction of coating solids for each coating. If you conducted testing to determine mass fraction of organic HAP, density, or volume fraction of coating solids, you must keep a copy of the complete test report. If you use information provided to you by the manufacturer or supplier of the material that was based on testing, you must keep the summary sheet of results provided to you by the manufacturer or supplier. You are not required to obtain the test report or other supporting documentation from the manufacturer or supplier.

(c) For each compliance period, the records specified in paragraphs (c)(1) through (4) of this section.

(1) A record of the coating operations on which you used each compliance option and the time periods (beginning and ending dates and times) for each option you used.

(2) For the compliant material option, a record of the calculation of the organic HAP content for each coating, using Equation 2 of §63.3941.

(d) A record of the name and volume of each coating, thinner and/or other additive, and cleaning material used during each compliance period. If you are using the compliant material option for all coatings at the source, you may maintain purchase records for each material used rather than a record of the volume used.

(e) A record of the mass fraction of organic HAP for each coating, thinner and/or other additive, and cleaning material used during each compliance period unless the material is tracked by weight.

(f) A record of the volume fraction of coating solids for each coating used during each compliance period.

(j) You must keep records of the date, time, and duration of each deviation.

#### **§ 63.3931 In what form and for how long must I keep my records?**

(a) Your records must be in a form suitable and readily available for expeditious review, according to §63.10(b)(1). Where appropriate, the records may be maintained as electronic spreadsheets or as a database.

(b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record on-site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record according to §63.10(b)(1). You may keep the records off-site for the remaining 3 years.

### **Compliance Requirements for the Compliant Material Option**

#### **§ 63.3940 By what date must I conduct the initial compliance demonstration?**

You must complete the initial compliance demonstration for the initial compliance period according to the requirements in §63.3941. The initial compliance period begins on the applicable compliance date specified in §63.3883 and ends on the last day of the 12th month following the compliance date. If the compliance date occurs on any day other than the first day of a month, then the initial compliance period extends through that month plus the next 12 months. The initial compliance demonstration includes the calculations according to §63.3941 and supporting documentation showing that during the initial compliance period, you used no coating with an organic HAP content that exceeded the applicable emission limit in §63.3890, and that you used no thinners and/or other additives, or cleaning materials that contained organic HAP as determined according to §63.3941(a).

#### **§ 63.3941 How do I demonstrate initial compliance with the emission limitations?**

You may use the compliant material option for any individual coating operation, for any group of coating operations in the affected source, or for all the coating operations in the affected source. You must use either the emission rate without add-on controls option or the emission rate with add-on controls option for any coating operation in the affected source for which you do not use this option. To demonstrate initial compliance using the compliant material option, the coating operation or group of coating operations must use no coating with an organic HAP content that exceeds the applicable emission limits in §63.3890 and must use no thinner and/or other additive, or cleaning material that contains organic HAP as determined according to this section. Any coating operation for which you use the compliant material option is not required to meet the operating limits or work practice standards required in §§63.3892 and 63.3893, respectively. You must conduct a separate initial compliance demonstration for each general use, high performance, magnet wire, rubber-to-metal, and extreme performance fluoropolymer coating operation unless you are demonstrating compliance with a predominant activity or facility-specific emission limit as provided in §63.3890(c). If you are demonstrating compliance with a predominant activity or facility-specific emission limit as provided in §63.3890(c), you must demonstrate that all coating operations included in the predominant activity determination or calculation of the facility-specific emission limit comply with that limit. You must meet all the requirements of this section. Use the procedures in this section on each coating, thinner and/or other additive, and cleaning material in the condition it is in when it is received from its manufacturer or supplier and prior to any alteration. You do not need to redetermine the organic HAP content of coatings, thinners and/or other additives, and cleaning materials that are reclaimed on-site (or reclaimed off-site if you have documentation showing that you received back the exact same materials that were sent off-site) and reused in the coating operation for which you use the compliant material option, provided these materials in their condition as received were demonstrated to comply with the compliant material option.

(a) *Determine the mass fraction of organic HAP for each material used.* You must determine the mass fraction of organic HAP for each coating, thinner and/or other additive, and cleaning material used during the compliance period by using one of the options in paragraphs (a)(1) through (5) of this section.

(1) *Method 311 (appendix A to 40 CFR part 63).* You may use Method 311 for determining the mass fraction of organic HAP. Use the procedures specified in paragraphs (a)(1)(i) and (ii) of this section when performing a Method 311 test.

(i) Count each organic HAP that is measured to be present at 0.1 percent by mass or more for Occupational Safety and Health Administration (OSHA)-defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and at 1.0 percent by mass or more for other compounds. For example, if toluene (not an OSHA carcinogen) is measured to be 0.5 percent of the material by mass, you do not have to count it. Express the mass fraction of each organic HAP you count as a value truncated to four places after the decimal point ( e.g., 0.3791).

(ii) Calculate the total mass fraction of organic HAP in the test material by adding up the individual organic HAP mass fractions and truncating the result to three places after the decimal point ( e.g., 0.763).

(2) *Method 24 (appendix A to 40 CFR part 60)*. For coatings, you may use Method 24 to determine the mass fraction of nonaqueous volatile matter and use that value as a substitute for mass fraction of organic HAP. For reactive adhesives in which some of the HAP react to form solids and are not emitted to the atmosphere, you may use the alternative method contained in appendix A to subpart PPPP of this part, rather than Method 24. You may use the volatile fraction that is emitted, as measured by the alternative method in appendix A to subpart PPPP of this part, as a substitute for the mass fraction of organic HAP.

(3) *Alternative method*. You may use an alternative test method for determining the mass fraction of organic HAP once the Administrator has approved it. You must follow the procedure in §63.7(f) to submit an alternative test method for approval.

(4) *Information from the supplier or manufacturer of the material*. You may rely on information other than that generated by the test methods specified in paragraphs (a)(1) through (3) of this section, such as manufacturer's formulation data, if it represents each organic HAP that is present at 0.1 percent by mass or more for OSHA-defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and at 1.0 percent by mass or more for other compounds. For example, if toluene (not an OSHA carcinogen) is 0.5 percent of the material by mass, you do not have to count it. For reactive adhesives in which some of the HAP react to form solids and are not emitted to the atmosphere, you may rely on manufacturer's data that expressly states the organic HAP or volatile matter mass fraction emitted. If there is a disagreement between such information and results of a test conducted according to paragraphs (a)(1) through (3) of this section, then the test method results will take precedence unless, after consultation, you demonstrate to the satisfaction of the enforcement agency that the formulation data are correct.

(5) *Solvent blends*. Solvent blends may be listed as single components for some materials in data provided by manufacturers or suppliers. Solvent blends may contain organic HAP which must be counted toward the total organic HAP mass fraction of the materials. When test data and manufacturer's data for solvent blends are not available, you may use the default values for the mass fraction of organic HAP in these solvent blends listed in Table 3 or 4 to this subpart. If you use the tables, you must use the values in Table 3 for all solvent blends that match Table 3 entries according to the instructions for Table 3, and you may use Table 4 only if the solvent blends in the materials you use do not match any of the solvent blends in Table 3 and you know only whether the blend is aliphatic or aromatic. However, if the results of a Method 311 (appendix A to 40 CFR part 63) test indicate higher values than those listed on Table 3 or 4 to this subpart, the Method 311 results will take precedence unless, after consultation, you demonstrate to the satisfaction of the enforcement agency that the formulation data are correct.

(b) *Determine the volume fraction of coating solids for each coating*. You must determine the volume fraction of coating solids (liters (gal) of coating solids per liter (gal) of coating) for each coating used during the compliance period by a test, by information provided by the supplier or the manufacturer of the material, or by calculation, as specified in paragraphs (b)(1) through (4) of this section. If test results obtained according to paragraph (b)(1) of this section do not agree with the information obtained under paragraph (b)(3) or (4) of this section, the test results will take precedence unless, after consultation, you demonstrate to the satisfaction of the enforcement agency that the formulation data are correct.

(1) *ASTM Method D2697–86 (Reapproved 1998) or ASTM Method D6093–97 (Reapproved 2003)*. You may use ASTM Method D2697–86 (Reapproved 1998), “Standard Test Method for Volume Nonvolatile Matter in Clear or Pigmented Coatings” (incorporated by reference, see §63.14), or ASTM Method D6093–97 (Reapproved 2003), “Standard Test Method for Percent Volume Nonvolatile Matter in Clear or Pigmented Coatings Using a Helium Gas Pycnometer” (incorporated by reference, see §63.14), to determine the volume fraction of coating solids for each coating. Divide the nonvolatile volume percent obtained with the methods by 100 to calculate volume fraction of coating solids.

(2) *Alternative method*. You may use an alternative test method for determining the solids content of each coating once the Administrator has approved it. You must follow the procedure in §63.7(f) to submit an alternative test method for approval.

(3) *Information from the supplier or manufacturer of the material*. You may obtain the volume fraction of coating solids for each coating from the supplier or manufacturer.

(4) *Calculation of volume fraction of coating solids*. You may determine the volume fraction of coating solids using Equation 1 of this section:

$$V_s = 1 - \frac{m_{\text{volatiles}}}{D_{\text{avg}}} \quad (\text{Eq. 1})$$

Where:

$V_s$  = Volume fraction of coating solids, liters (gal) coating solids per liter (gal) coating.

$m_{\text{volatiles}}$  = Total volatile matter content of the coating, including HAP, volatile organic compounds (VOC), water, and exempt compounds, determined according to Method 24 in appendix A of 40 CFR part 60, grams volatile matter per liter coating.

$D_{\text{avg}}$  = Average density of volatile matter in the coating, grams volatile matter per liter volatile matter, determined from test results using ASTM Method D1475–98, “Standard Test Method for Density of Liquid Coatings, Inks, and Related Products” (incorporated by reference, see §63.14), information from the supplier or manufacturer of the material, or reference sources providing density or specific gravity data for pure materials. If there is disagreement between ASTM Method D1475–98 test results and other information sources, the test results will take precedence unless, after consultation you demonstrate to the satisfaction of the enforcement agency that the formulation data are correct.

(c) *Determine the density of each coating*. Determine the density of each coating used during the compliance period from test results using ASTM Method D1475–98, “Standard Test Method for Density of Liquid Coatings, Inks, and Related Products” (incorporated by reference, see §63.14), information from the supplier or manufacturer of the material, or specific gravity data for pure chemicals. If there is disagreement between ASTM Method D1475–98 test results and the supplier’s or manufacturer’s information, the test results will take precedence unless, after consultation you demonstrate to the satisfaction of the enforcement agency that the formulation data are correct.

(d) *Determine the organic HAP content of each coating*. Calculate the organic HAP content, kg (lb) of organic HAP emitted per liter (gal) coating solids used, of each coating used during the compliance period using Equation 2 of this section:

$$H_c = \frac{(D_c)(W_c)}{V_s} \quad (\text{Eq. 2})$$

Where:

$H_c$  = Organic HAP content of the coating, kg organic HAP emitted per liter (gal) coating solids used.

$D_c$  = Density of coating, kg coating per liter (gal) coating, determined according to paragraph (c) of this section.

$W_c$  = Mass fraction of organic HAP in the coating, kg organic HAP per kg coating, determined according to paragraph (a) of this section.

$V_s$  = Volume fraction of coating solids, liter (gal) coating solids per liter (gal) coating, determined according to paragraph (b) of this section.

(e) *Compliance demonstration.* The calculated organic HAP content for each coating used during the initial compliance period must be less than or equal to the applicable emission limit in §63.3890; and each thinner and/or other additive, and cleaning material used during the initial compliance period must contain no organic HAP, determined according to paragraph (a) of this section. You must keep all records required by §§63.3930 and 63.3931. As part of the notification of compliance status required in §63.3910, you must identify the coating operation(s) for which you used the compliant material option and submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the initial compliance period because you used no coatings for which the organic HAP content exceeded the applicable emission limit in §63.3890, and you used no thinners and/or other additives, or cleaning materials that contained organic HAP, determined according to the procedures in paragraph (a) of this section.

**§ 63.3942 How do I demonstrate continuous compliance with the emission limitations?**

(a) For each compliance period to demonstrate continuous compliance, you must use no coating for which the organic HAP content (determined using Equation 2 of §63.3941) exceeds the applicable emission limit in §63.3890, and use no thinner and/or other additive, or cleaning material that contains organic HAP, determined according to §63.3941(a). A compliance period consists of 12 months. Each month, after the end of the initial compliance period described in §63.3940, is the end of a compliance period consisting of that month and the preceding 11 months. If you are complying with a facility-specific emission limit under §63.3890(c), you must also perform the calculation using Equation 1 in §63.3890(c)(2) on a monthly basis using the data from the previous 12 months of operation.

(b) If you choose to comply with the emission limitations by using the compliant material option, the use of any coating, thinner and/or other additive, or cleaning material that does not meet the criteria specified in paragraph (a) of this section is a deviation from the emission limitations that must be reported as specified in §§63.3910(c)(6) and 63.3920(a)(5).

(c) As part of each semiannual compliance report required by §63.3920, you must identify the coating operation(s) for which you used the compliant material option. If there were no deviations from the applicable emission limit in §63.3890, submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the reporting period because you used no coatings for which the organic HAP content exceeded the applicable emission limit in §63.3890, and you used no thinner and/or other additive, or cleaning material that contained organic HAP, determined according to §63.3941(a).

(d) You must maintain records as specified in §§63.3930 and 63.3931.

**Other Requirements and Information**

**§ 63.3980 Who implements and enforces this subpart?**

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

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

(c) The authorities that will not be delegated to State, local, or tribal agencies are listed in paragraphs (c)(1) through (4) of this section:

(1) Approval of alternatives to the requirements in §63.3881 through 3883 and §63.3890 through 3893.

(2) Approval of major alternatives to test methods under §63.7(e)(2)(ii) and (f) and as defined in §63.90.

(3) Approval of major alternatives to monitoring under §63.8(f) and as defined in §63.90.

(4) Approval of major alternatives to recordkeeping and reporting under §63.10(f) and as defined in §63.90.

**§ 63.3981 What definitions apply to this subpart?**

Terms used in this subpart are defined in the CAA, in 40 CFR 63.2, and in this section as follows:

*Additive* means a material that is added to a coating after purchase from a supplier (e.g., catalysts, activators, accelerators).

*Add-on control* means an air pollution control device, such as a thermal oxidizer or carbon adsorber, that reduces pollution in an air stream by destruction or removal before discharge to the atmosphere.

*Adhesive, adhesive coating* means any chemical substance that is applied for the purpose of bonding two surfaces together. Products used on humans and animals, adhesive tape, contact paper, or any other product with an adhesive incorporated onto or in an inert substrate shall not be considered adhesives under this subpart.

*Assembled on-road vehicle coating* means any coating operation in which coating is applied to the surface of some component or surface of a fully assembled motor vehicle or trailer intended for on-road use including, but not limited to, components or surfaces on automobiles and light-duty trucks that have been repaired after a collision or otherwise repainted, fleet delivery trucks, and motor homes and other recreational vehicles (including camping trailers and fifth wheels). Assembled on-road vehicle coating includes the concurrent coating of parts of the assembled on-road vehicle that are painted off-vehicle to protect systems, equipment, or to allow full coverage. Assembled on-road vehicle coating does not include surface coating operations that meet the applicability criteria of the automobiles and light-duty trucks NESHAP. Assembled on-road vehicle coating also does not include the use of adhesives, sealants, and caulks used in assembling on-road vehicles.

*Capture device* means a hood, enclosure, room, floor sweep, or other means of containing or collecting emissions and directing those emissions into an add-on air pollution control device.

*Capture efficiency or capture system efficiency* means the portion (expressed as a percentage) of the pollutants from an emission source that is delivered to an add-on control device.

*Capture system* means one or more capture devices intended to collect emissions generated by a coating operation in the use of coatings or cleaning materials, both at the point of application and at subsequent points where emissions from the coatings and cleaning materials occur, such as flashoff, drying, or curing. As used in this subpart, multiple capture devices that collect emissions generated by a coating operation are considered a single capture system.

*Cleaning material* means a solvent used to remove contaminants and other materials, such as dirt, grease, oil, and dried or wet coating (e.g., depainting or paint stripping), from a substrate before or after coating application or from equipment associated with a coating operation, such as spray booths, spray guns, racks, tanks, and hangers. Thus, it includes any cleaning material used on substrates or equipment or both.

*Coating* means a material applied to a substrate for decorative, protective, or functional purposes. Such materials include, but are not limited to, paints, sealants, liquid plastic coatings, caulks, inks, adhesives, and maskants. Decorative, protective, or functional materials that consist only of protective oils for metal, acids, bases, or any combination of these substances, or paper film or plastic film which may be pre-coated with an adhesive by the film manufacturer, are not considered coatings for the purposes of this subpart. A liquid plastic coating means a coating made from fine particle-size polyvinyl chloride (PVC) in solution (also referred to as a plastisol).

*Coating operation* means equipment used to apply cleaning materials to a substrate to prepare it for coating application (surface preparation) or to remove dried coating; to apply coating to a substrate (coating application) and to dry or cure the coating after application; or to clean coating operation equipment (equipment cleaning). A single coating operation may include any combination of these types of equipment, but always includes at least the point at which a given quantity of coating or cleaning material is applied to a given part and all subsequent points in the affected source where organic HAP are emitted from the specific quantity of coating or cleaning material on the specific part. There may be multiple coating operations in an affected source. Coating application with handheld, non-refillable aerosol containers, touch-up markers, or marking pens is not a coating operation for the purposes of this subpart.

*Coatings solids* means the nonvolatile portion of the coating that makes up the dry film.

*Continuous parameter monitoring system (CPMS)* means the total equipment that may be required to meet the data acquisition and availability requirements of this subpart, used to sample, condition (if applicable), analyze, and provide a record of coating operation, or capture system, or add-on control device parameters.

*Controlled coating operation* means a coating operation from which some or all of the organic HAP emissions are routed through an emission capture system and add-on control device.

*Deviation* means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

- (1) Fails to meet any requirement or obligation established by this subpart including but not limited to, any emission limit or operating limit or work practice standard;
- (2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or
- (3) Fails to meet any emission limit, or operating limit, or work practice standard in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.

*Emission limitation* means the aggregate of all requirements associated with a compliance option including emission limit, operating limit, work practice standard, etc.

*Enclosure* means a structure that surrounds a source of emissions and captures and directs the emissions to an add-on control device.

*Exempt compound* means a specific compound that is not considered a VOC due to negligible photochemical reactivity. The exempt compounds are listed in 40 CFR 51.100(s).

*Extreme performance fluoropolymer coating* means coatings that are formulated systems based on fluoropolymer resins which often contain bonding matrix polymers dissolved in non-aqueous solvents as well as other ingredients. Extreme performance fluoropolymer coatings are typically used when one or more critical performance criteria are required including, but not limited to a nonstick low-energy surface, dry film lubrication, high resistance to chemical attack, extremely wide operating temperature, high electrical insulating properties, or that the surface comply with government (e.g., USDA, FDA) or third party specifications for health, safety, reliability, or performance. Once applied to a substrate, extreme performance fluoropolymer coatings undergo a curing process that typically requires high temperatures, a chemical reaction, or other specialized technology.

*Facility maintenance* means the routine repair or renovation (including the surface coating) of the tools, equipment, machinery, and structures that comprise the infrastructure of the affected facility and that are necessary for the facility to function in its intended capacity.

*General use coating* means any material that meets the definition of coating but does not meet the definition of high performance coating, rubber-to-metal coating, magnet wire coating, or extreme performance fluoropolymer coating as defined in this section.

*High performance architectural coating* means any coating applied to architectural subsections which is required to meet the specifications of Architectural Aluminum Manufacturer's Association's publication number AAMA 605.2-2000.

*High performance coating* means any coating that meets the definition of high performance architectural coating or high temperature coating in this section.

*High temperature coating* means any coating applied to a substrate which during normal use must withstand temperatures of at least 538 degrees Celsius (1000 degrees Fahrenheit).

*Hobby shop* means any surface coating operation, located at an affected source, that is used exclusively for personal, noncommercial purposes by the affected source's employees or assigned personnel.

*Magnet wire coatings*, commonly referred to as magnet wire enamels, are applied to a continuous strand of wire which will be used to make turns (windings) in electrical devices such as coils, transformers, or motors. Magnet wire coatings provide high dielectric strength and turn-to-turn conductor insulation. This allows the turns of an electrical device to be placed in close proximity to one another which leads to increased coil effectiveness and electrical efficiency.

*Magnet wire coating machine* means equipment which applies and cures magnet wire coatings.

*Manufacturer's formulation data* means data on a material (such as a coating) that are supplied by the material manufacturer based on knowledge of the ingredients used to manufacture that material, rather than based on testing of the material with the test methods specified in §63.3941. Manufacturer's formulation data may include, but are not limited to, information on density, organic HAP content, volatile organic matter content, and coating solids content.

*Mass fraction of organic HAP* means the ratio of the mass of organic HAP to the mass of a material in which it is contained, expressed as kg of organic HAP per kg of material.

*Month* means a calendar month or a pre-specified period of 28 days to 35 days to allow for flexibility in recordkeeping when data are based on a business accounting period.

*Non-HAP coating* means, for the purposes of this subpart, a coating that contains no more than 0.1 percent by mass of any individual organic HAP that is an OSHA-defined carcinogen as specified in 29 CFR 1910.1200(d)(4) and no more than 1.0 percent by mass for any other individual HAP.

*Organic HAP content* means the mass of organic HAP emitted per volume of coating solids used for a coating calculated using Equation 2 of §63.3941. The organic HAP content is determined for the coating in the condition it is in when received from its manufacturer or supplier and does not account for any alteration after receipt. For reactive adhesives in which some of the HAP react to form solids and are not emitted to the atmosphere, organic HAP content is the mass of organic HAP that is emitted, rather than the organic HAP content of the coating as it is received.

*Permanent total enclosure (PTE)* means a permanently installed enclosure that meets the criteria of Method 204 of appendix M, 40 CFR part 51, for a PTE and that directs all the exhaust gases from the enclosure to an add-on control device.

*Personal watercraft* means a vessel (boat) which uses an inboard motor powering a water jet pump as its primary source of motive power and which is designed to be operated by a person or persons sitting, standing, or kneeling on the vessel, rather than in the conventional manner of sitting or standing inside the vessel.

*Protective oil* means an organic material that is applied to metal for the purpose of providing lubrication or protection from corrosion without forming a solid film. This definition of protective oil includes, but is not limited to, lubricating oils, evaporative oils (including those that evaporate completely), and extrusion oils. Protective oils used on miscellaneous metal parts and products include magnet wire lubricants and soft temporary protective coatings that are removed prior to installation or further assembly of a part or component.

*Reactive adhesive* means adhesive systems composed, in part, of volatile monomers that react during the adhesive curing reaction, and, as a result, do not evolve from the film during use. These volatile components instead become integral parts of the adhesive through chemical reaction. At least 70 percent of the liquid components of the system, excluding water, react during the process.

*Research or laboratory facility* means a facility whose primary purpose is for research and development of new processes and products, that is conducted under the close supervision of technically trained personnel, and is not engaged in the manufacture of final or intermediate products for commercial purposes, except in a *de minimis* manner.

*Responsible official* means responsible official as defined in 40 CFR 70.2.

*Rubber-to-metal coatings* are coatings that contain heat-activated polymer systems in either solvent or water that, when applied to metal substrates, dry to a non-tacky surface and react chemically with the rubber and metal during a vulcanization process.

*Startup, initial* means the first time equipment is brought online in a facility.

*Surface preparation* means use of a cleaning material on a portion of or all of a substrate. This includes use of a cleaning material to remove dried coating, which is sometimes called depainting.

*Temporary total enclosure* means an enclosure constructed for the purpose of measuring the capture efficiency of pollutants emitted from a given source as defined in Method 204 of appendix M, 40 CFR part 51.

*Thinner* means an organic solvent that is added to a coating after the coating is received from the supplier.

*Total volatile hydrocarbon (TVH)* means the total amount of nonaqueous volatile organic matter determined according to Methods 204 and 204A through 204F of appendix M to 40 CFR part 51 and substituting the term TVH each place in the methods where the term VOC is used. The TVH includes both VOC and non-VOC.

*Uncontrolled coating operation* means a coating operation from which none of the organic HAP emissions are routed through an emission capture system and add-on control device.

*Volatile organic compound (VOC)* means any compound defined as VOC in 40 CFR 51.100(s).

*Volume fraction of coating solids* means the ratio of the volume of coating solids (also known as the volume of nonvolatiles) to the volume of a coating in which it is contained; liters (gal) of coating solids per liter (gal) of coating.

*Wastewater* means water that is generated in a coating operation and is collected, stored, or treated prior to being discarded or discharged.

**Table 2 to Subpart Mmmm of Part 63—Applicability of General Provisions to Subpart Mmmm of Part 63**

You must comply with the applicable General Provisions requirements according to the following table:

| Citation               | Subject   | Applicable to Subpart Mmmm | Explanation  |
|------------------------|---|----------------------------|--|
| § 63.1(a)(1)-(14)..... | General Applicability.  | Yes.....                   |  |
| § 63.1(b)(1)-(3).....  | Initial Applicability Determination.                                    | Yes.....                   | Applicability to subpart Mmmm is also specified in §63.3881. |
| § 63.1(c)(1).....      | Applicability After Standard Established.                               | Yes.....                   |  |
| § 63.1(c)(2)-(3).....  | Applicability of Permit Program for Area Sources.                       | No.....                    | Area sources are not subject to subpart Mmmm.                |
| § 63.1(c)(4)-(5).....  | Extensions and Notifications.   | Yes.....                   |  |
| § 63.1(e).....         | Applicability of Permit Program Before Relevant Standard is Set.        | Yes.....                   |  |
| § 63.2.....            | Definitions.....  | Yes.....                   | Additional definitions are specified in § 63.3981.           |
| § 63.1(a)-(c).....     | Units and Abbreviations.  | Yes.....                   |  |
| § 63.4(a)(1)-(5).....  | Prohibited Activities.  | Yes.....                   |  |
| § 63.4(b)-(c).....     | Circumvention/ Severability.  | Yes.....                   |  |
| § 63.5(a).....         | Construction/ Reconstruction.   | Yes.....                   |  |
| § 63.5(b)(1)-(6).....  | Requirements for Existing Newly Constructed, and Reconstructed Sources. | Yes.....                   |  |
| § 63.5(d).....         | Application for Approval of Construction/ Reconstruction.               | Yes.....                   |  |
| § 63.5(e).....         | Approval of Construction/ Reconstruction.                               | Yes.....                   |  |
| § 63.5(f).....         | Approval of Construction/ Reconstruction Based on Prior State Review.   | Yes.....                   |  |

| Citation               | Subject   | Applicable to Subpart Mmmm | Explanation   |
|------------------------|---|----------------------------|---|
| § 63.6(a).....         | Compliance With Standards and Maintenance Requirements - Applicability. | Yes.....                   |   |
| § 63.6(b)(1)-(7).....  | Compliance Dates for New and Reconstructed Sources.                     | Yes.....                   | Section 63.3883 specifies the compliance dates.   |
| § 63.6(c)(1)-(5).....  | Compliance Dates for Existing Sources.                                  | Yes.....                   | Section 63.3883 specifies the compliance dates.   |
| § 63.6(e)(1)-(2).....  | Operation and Maintenance.  | Yes.....                   |   |
| § 63.6(e)(3).....      | Startup, Shutdown, and Malfunction Plan.                                | Yes.....                   | Only sources using an add-on control device to comply with the standard must complete startup, shutdown, and malfunction plans.     |
| § 63.6(f)(1).....      | Compliance Except During Startup, Shutdown, and Malfunction.            | Yes.....                   | Applies only to sources using an add-on control device to comply with the standard.   |
| § 63.6(f)(2)-(3).....  | Methods for Determining Compliance..                                    | Yes.....                   |   |
| § 63.6(g)(1)-(3).....  | Use of an Alternative Standard.   | Yes.....                   |   |
| § 63.6(h).....         | Compliance With Opacity/Visible Emission Standards.                     | No.....                    | Subpart Mmmm does not establish opacity standards and does not require continuous opacity monitoring systems (COMS).                |
| § 63.6(i)(1)-(16)..... | Extension of Compliance.  | Yes.....                   |   |
| § 63.6(j).....         | Presidential Compliance Exemption.                                      | Yes.....                   |   |
| § 63.7(a)(1).....      | Performance Test Requirements - Applicability.                          | Yes.....                   | Applies to all affected sources. Additional requirements for performance testing are specified in §§ 63.3964, 63.3965, and 63.3966. |

| Citation              | Subject   | Applicable to Subpart Mmmm | Explanation   |
|-----------------------|---|----------------------------|---|
| § 63.7(a)(2).....     | Performance Test Requirements - Dates.  | Yes.....                   | Applies only to performance tests for capture system and control device efficiency at sources using these to comply with the standard. Section 63.3960 specifies the schedule for performance test requirements that are earlier than those specified in §63.7(a)(2). |
| § 63.7(a)(3).....     | Performance Tests Required By the Administrator.  | Yes.....                   |   |
| § 63.7(b)-(e).....    | Performance Test Requirements - Notification, Quality Assurance, Facilities Necessary for Safe Testing, Conditions During Test. | Yes.....                   | Applies only to performance tests for capture system and add-on control device efficiency at sources using these to comply with the standard.   |
| § 63.7(f).....        | Performance Test Requirements - Use of Alternative Test Method.   | Yes.....                   | Applies to all test methods except those used to determine capture system efficiency.   |
| § 63.7(g)-(h).....    | Performance Test Requirements - Data Analysis, Recordkeeping, Reporting, Waiver of Test.  | Yes.....                   | Applies only to performance tests for capture system and add-on control device efficiency at sources using these to comply with the standard.   |
| § 63.8(a)(1)-(3)..... | Monitoring Requirements - Applicability.  | Yes.....                   | Applies only to monitoring of capture system and add-on control device efficiency at sources using these to comply with the standard. Additional requirements for monitoring are specified in § 63.3968.  |
| § 63.8(a)(4).....     | Additional Monitoring Requirements.   | No.....                    | Subpart Mmmm does not have monitoring requirements for flares.  |
| § 63.8(b).....        | Conduct of Monitoring.  | Yes.....                   |   |

| Citation              | Subject  | Applicable to Subpart Mmmm | Explanation  |
|-----------------------|--|----------------------------|--|
| § 63.8(c)(1)-(3)..... | Continuous Monitoring Systems (CMS) Operation and Maintenance. | Yes.....                   | Applies only to monitoring of capture system and add-on control device efficiency at sources using these to comply with the standard. Additional requirements for CMS operations and maintenance are specified in § 63.3968. |
| § 63.8(c)(4).....     | CMS.....   | No.....                    | § 63.3968 specifies the requirements for the operation of CMS for capture systems and add-on control devices at sources using these to comply.   |
| § 63.8(c)(5).....     | COMS.....  | No.....                    | Subpart Mmmm does not have opacity or visible emission standards.  |
| § 63.8(c)(6).....     | CMS Requirements.....  | No.....                    | Section 63.3968 specifies the requirements for monitoring systems for capture systems and add-on control devices at sources using these to comply.   |
| § 63.8(c)(7).....     | CMS Out-of-Control Periods.                                    | Yes.....                   |  |
| § 63.8(c)(8).....     | CMS Out-of-Control Periods and Reporting.                      | No.....                    | § 63.3920 requires reporting of CMS out-of-control periods.  |
| § 63.8(d)-(e).....    | Quality Control Program and CMS Performance Evaluation.        | No.....                    | Subpart Mmmm does not require the use of continuous emissions monitoring systems.  |
| § 63.8(f)(1)-(5)..... | Use of an Alternative Monitoring Method.                       | Yes.....                   |  |
| § 63.8(f)(6).....     | Alternative to Relative Accuracy Test.                         | No.....                    | Subpart Mmmm does not require the use of continuous emissions monitoring systems.  |
| § 63.8(g)(1)-(5)..... | Data Reduction.....  | No.....                    | Sections 63.3967 and 63.3968 specify monitoring data reduction.  |
| § 63.9(a)-(d).....    | Notification Requirements.                                     | Yes.....                   |  |

| Citation                    | Subject   | Applicable to Subpart M MMM | Explanation  |
|-----------------------------|---|-----------------------------|--|
| § 63.9(e).....              | Notification of Performance Test.   | Yes.....                    | Applies only to capture system and add-on control device performance tests at sources using these to comply with the standard.     |
| § 63.9(f).....              | Notification of Visible Emissions/Opacity Test.                               | No.....                     | Subpart M MMM does not have opacity or visible emissions standards.  |
| § 63.9(g)(1)-(3).....       | Additional Notifications When Using CMS.                                      | No.....                     | Subpart M MMM does not require the use of continuous emissions monitoring systems.   |
| § 63.9(h).....              | Notification of Compliance Status.  | Yes.....                    | Section 63.3910 specifies the dates for submitting the notification of compliance status.  |
| § 63.9(i).....              | Adjustment of Submittal Deadlines.  | Yes.....                    |  |
| § 63.9(j).....              | Change in Previous Information.   | Yes.....                    |  |
| § 63.10(a).....             | Recordkeeping/Reporting - Applicability and General Information.              | Yes.....                    |  |
| § 63.10(b)(1).....          | General Recordkeeping Requirements.   | Yes.....                    | Additional requirements are specified in §§ 63.3930 and 63.3931.   |
| § 63.10(b)(2) (i)-(v).....  | Recordkeeping Relevant to Startup, Shutdown, and Malfunction Periods and CMS. | Yes.....                    | Requirements for startup, shutdown, and malfunction records only apply to add-on control devices used to comply with the standard. |
| § 63.10(b)(2) (vi)-(xi).... | .....   | Yes.....                    |  |
| § 63.10(b)(2) (xii).....    | Records.....  | Yes.....                    |  |
| § 63.10(b)(2) (xiii).....   | .....   | No.....                     | Subpart M MMM does not require the use of continuous emissions monitoring systems.   |
| § 63.10(b)(2) (xiv).....    | .....   | Yes.....                    |  |
| § 63.10(b)(3).....          | Recordkeeping Requirements for Applicability Determinations.                  | Yes.....                    |  |
| § 63.10(c) (1)-(6).....     | Additional Recordkeeping Requirements for Sources with CMS.                   | Yes.....                    |  |
| § 63.10(c) (7)-(8).....     | .....   | No.....                     | The same records are required in §63.3920(a)(7).   |

| Citation                 | Subject  | Applicable to Subpart M MMM | Explanation  |
|--------------------------|--|-----------------------------|--|
| § 63.10(c) (9)-(15)..... | .....  | Yes.....                    |  |
| § 63.10(d)(1).....       | General Reporting Requirements.                          | Yes.....                    | Additional requirements are specified in § 63.3920.  |
| § 63.10(d)(2).....       | Report of Performance Test Results.                      | Yes.....                    | Additional requirements are specified in §63.3920(b).                                      |
| § 63.10(d)(3).....       | Reporting Opacity or Visible Emissions Observations.     | No.....                     | Subpart M MMM does not require opacity or visible emissions observations.                  |
| § 63.10(d)(4).....       | Progress Reports for Sources With Compliance Extensions. | Yes.....                    |  |
| § 63.10(d)(5).....       | Startup, Shutdown, and Malfunction Reports.              | Yes.....                    | Applies only to add-on control devices at sources using these to comply with the standard. |
| § 63.10(e) (1)-(2).....  | Additional CMS Reports                                   | No.....                     | Subpart M MMM does not require the use of continuous emissions monitoring systems.         |
| § 63.10(e) (3).....      | Excess Emissions/CMS Performance Reports.                | No.....                     | Section 63.3920 (b) specifies the contents of periodic compliance reports.                 |
| § 63.10(e) (4).....      | COMS Data Reports.....                                   | No.....                     | Subpart M MMM does not specify requirements for opacity or COMS.                           |
| § 63.10(f).....          | Recordkeeping/Reporting Waiver.                          | Yes.....                    |  |
| § 63.11.....             | Control Device Requirements/Flares.                      | No.....                     | Subpart M MMM does not specify use of flares for compliance.                               |
| § 63.12.....             | State Authority and Delegations.                         | Yes.....                    |  |
| § 63.13.....             | Addresses.....   | Yes.....                    |  |
| § 63.14.....             | Incorporation by Reference.                              | Yes.....                    |  |
| § 63.15.....             | Availability of Information/Confidentiality.             | Yes.....                    |  |

**Table 3 to Subpart MMMM of Part 63—Default Organic HAP Mass Fraction for Solvents and Solvent Blends**

You may use the mass fraction values in the following table for solvent blends for which you do not have test data or manufacturer's formulation data and which match either the solvent blend name or the chemical abstract series (CAS) number. If a solvent blend matches both the name and CAS number for an entry, that entry's organic HAP mass fraction must be used for that solvent blend. Otherwise, use the organic HAP mass fraction for the entry matching either the solvent blend name or CAS number, or use the organic HAP mass fraction from table 4 to this subpart if neither the name or CAS number match.

| <b>Solvent/solvent blend</b>      | <b>CAS. No.</b> | <b>Average organic HAP mass fraction</b> | <b>Typical organic HAP, percent by mass</b> |
|-----------------------------------|-----------------|--|---|
| 1. Toluene                        | 108-88-3        | 1.0                                      | Toluene.                                    |
| 2. Xylene(s)                      | 1330-20-7       | 1.0                                      | Xylenes, ethylbenzene.                      |
| 3. Hexane                         | 110-54-3        | 0.5                                      | n-hexane.                                   |
| 4. n-Hexane                       | 110-54-3        | 1.0                                      | n-hexane.                                   |
| 5. Ethylbenzene                   | 100-41-4        | 1.0                                      | Ethylbenzene.                               |
| 6. Aliphatic 140                  |                 | 0  | None.                                       |
| 7. Aromatic 100                   |                 | 0.02                                     | 1% xylene, 1% cumene.                       |
| 8. Aromatic 150                   |                 | 0.09                                     | Naphthalene.                                |
| 9. Aromatic naphtha               | 64742-95-6      | 0.02                                     | 1% xylene, 1% cumene.                       |
| 10. Aromatic solvent              | 64742-94-5      | 0.1                                      | Naphthalene.                                |
| 11. Exempt mineral spirits        | 8032-32-4       | 0  | None.                                       |
| 12. Ligroines (VM & P)            | 8032-32-4       | 0  | None.                                       |
| 13. Lactol spirits                | 64742-89-6      | 0.15                                     | Toluene.                                    |
| 14. Low aromatic white spirit     | 64742-82-1      | 0  | None.                                       |
| 15. Mineral spirits               | 64742-88-7      | 0.01                                     | Xylenes.                                    |
| 16. Hydrotreated naphtha          | 64742-48-9      | 0  | None.                                       |
| 17. Hydrotreated light distillate | 64742-47-8      | 0.001                                    | Toluene.                                    |
| 18. Stoddard solvent              | 8052-41-3       | 0.01                                     | Xylenes.                                    |
| 19. Super high-flash naphtha      | 64742-95-6      | 0.05                                     | Xylenes.                                    |
| 20. Varsol <sup>®</sup> solvent   | 8052-49-3       | 0.01                                     | 0.5% xylenes, 0.5% ethylbenzene.            |
| 21. VM & P naphtha                | 64742-89-8      | 0.06                                     | 3% toluene, 3% xylene.                      |
| 22. Petroleum distillate mixture  | 68477-31-6      | 0.08                                     | 4% naphthalene, 4% biphenyl.                |

**Table 4 to Subpart MMMM of Part 63—Default Organic HAP Mass Fraction for Petroleum Solvent Groups<sup>a</sup>**

You may use the mass fraction values in the following table for solvent blends for which you do not have test data or manufacturer's formulation data.

| Solvent type           | Average organic HAP mass fraction | Typical organic HAP, percent by mass        |
|------------------------|-----------------------------------|---|
| Aliphatic <sup>b</sup> | 0.03                              | 1% Xylene, 1% Toluene, and 1% Ethylbenzene. |
| Aromatic <sup>c</sup>  | 0.06                              | 4% Xylene, 1% Toluene, and 1% Ethylbenzene. |

<sup>a</sup>Use this table only if the solvent blend does not match any of the solvent blends in Table 3 to this subpart by either solvent blend name or CAS number and you only know whether the blend is aliphatic or aromatic.

<sup>b</sup>Mineral Spirits 135, Mineral Spirits 150 EC, Naphtha, Mixed Hydrocarbon, Aliphatic Hydrocarbon, Aliphatic Naphtha, Naphthol Spirits, Petroleum Spirits, Petroleum Oil, Petroleum Naphtha, Solvent Naphtha, Solvent Blend.

<sup>c</sup>Medium-flash Naphtha, High-flash Naphtha, Aromatic Naphtha, Light Aromatic Naphtha, Light Aromatic Hydrocarbons, Aromatic Hydrocarbons, Light Aromatic Solvent.

**D.4.7 One Time Deadlines Relating to National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products [40 CFR Part 63, Subpart MMMM]**

The Permittee shall comply with the following requirements by the dates listed:

| Requirement                        | Rule Cite         | Affected Facility  | Deadline   |
|------------------------------------|-------------------|--|--|
| Initial Notification               | 40 CFR 63.3910(b) | One (1) paint booth, identified as CO5, all storage containers and mixing vessels in which coatings, thinners and/or other additives, and cleaning materials are stored or mixed, all manual and automated equipment and containers used for conveying coatings, thinners and/or other additives, and cleaning materials, and all storage containers and all manual and automated equipment and containers used for conveying waste materials generated by a coating operation | January 2, 2005.   |
| Notification of compliance status. | 40 CFR 63.3910(c) | Same as above  | No later than 30 calendar days following the end of the initial compliance period described in §63.3940. |

| Requirement   | Rule Cite               | Affected Facility | Deadline  |
|---|-------------------------|-------------------|---|
| First Semi-annual Compliance Report   | 40 CFR<br>63.3920(a)(1) | Same as above     | July 31, 2008   |
| Initial compliance demonstration for the initial compliance period according to the requirements of §63.3941. | 40 CFR<br>63.3940       | Same as above     | Initial compliance period is from January 2, 2007 through January 31, 2008. |

## SECTION E.1

## FACILITY OPERATION CONDITIONS

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

- (b) One (1) gray and ductile iron foundry line, constructed in 1988, identified as Plant 1, consisting of the following:
- (1) Melting Operations originally constructed in 1988 and modified in 2004, consisting of:
- (A) One (1) melting system, identified as P8, with a maximum capacity of 20 tons of metal per hour, consisting of three (3) electric induction furnaces, each with a melting capacity of 10 tons per hour, utilizing two (2) cartridge collectors for particulate control, identified as DC-3A and DC-3B, exhausting to a common stack ID No. 3;
- Note: The maximum throughput of metal for the melting system is limited to 20 tons per hour by the maximum throughput from the charge handling system of 20 tons of metal per hour.
- (C) One (1) holding system consisting of the following equipment:
- (1) Two (2) electric holding furnaces, identified as P9, each with a holding capacity of 50 tons and a total maximum throughput capacity of 100 tons of metal per hour;
- (2) Two (2) natural gas-fired metal treatment ladle heaters constructed in 2004, each with a rated capacity of 1.0 MMBtu/hr.
- (3) Two (2) natural gas-fired pouring ladle heaters (P10) constructed in 2004, each with a rated capacity of 0.4 MMBtu/hr.
- (c) Plant 1, Casting Line 2, constructed in 2004, with a capacity of 15 tons of metal per hour and 70 tons of sand per hour consisting of the following equipment:
- (1) One (1) pouring station identified as P13B controlled by dust collector DC3B, exhausting to stack 3B.
- (2) One (1) cooling line identified as P14B, controlled by baghouse BH6200, exhausting to stack 6200.
- (d) Plant 2, ductile iron foundry line, constructed in 1997, consisting of the following:
- (1) One (1) melting and pouring system, identified as ID # 1110 and 2000, respectively, with a maximum capacity of 10 tons of metal per hour, utilizing a baghouse (ID # BH6010) for particulate control, exhausting to stack ID # 6010, consisting of the following equipment:
- (A) Two (2) electric induction furnaces, each with a maximum capacity of 10 tons of metal per hour;
- (B) One (1) electric holding furnace (uncontrolled);
- (C) Two (2) natural gas-fired ladle heaters, identified as ID # 6600 and 6610, each with a maximum heat input rate of 2 MMBtu per hour;

Note: The maximum throughput of metal for the melting and pouring system is limited to 10 tons per hour by the maximum throughput from the charge handling system of 10 tons of metal per hour and the power control systems at the plant.

- (2) One (1) mold machine, identified as ID #2010, with a maximum capacity of 10 tons of metal per hour and 70 tons of sand per hour, utilizing one (1) baghouse (ID # BH6010) for particulate control, exhausting to stack ID# 6010; and
- (3) One (1) casting cooling and conveyor system, identified as #2015 and 2020, respectively, with a maximum capacity of 10 tons of metal per hour and 70 tons of sand per hour, utilizing two (2) baghouses (ID # BH6020 and 6030) for particulate control exhausting to stack ID#s 6020 and 6030A and 6030B.

Under the Iron and Steel Foundries NESHAP (40 CFR 63, Subpart EEEEE) the above listed facilities are considered an existing affected source.

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

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

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

- (a) Pursuant to 40 CFR 63.7760, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1-1 for the above listed facilities and the fugitive emissions from the foundry operations as specified in Table 1 of 40 CFR 63, Subpart EEEEE in accordance with schedule in 40 CFR 63 Subpart EEEEE.
- (b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports to:

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

#### **E.1.2 National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Requirements [40 CFR Part 63, Subpart EEEEE] [326 IAC 20-92]**

Pursuant to CFR Part 63, Subpart EEEEE, the Permittee shall comply with the provisions of the National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries, which are incorporated by reference as 326 IAC 20-92 for the above listed facilities and the fugitive emissions from the foundry operations as specified as follows.

#### **What this Subpart Covers**

##### **§ 63.7680 What is the purpose of this subpart?**

This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for iron and steel foundries. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emissions limitations, work practice standards, and operation and maintenance requirements in this subpart.

**§ 63.7681 Am I subject to this subpart?**

You are subject to this subpart if you own or operate an iron and steel foundry that is (or is part of) a major source of hazardous air pollutant (HAP) emissions. Your iron and steel foundry is a major source of HAP for purposes of this subpart if it emits or has the potential to emit any single HAP at a rate of 10 tons or more per year or any combination of HAP at a rate of 25 tons or more per year or if it is located at a facility that emits or has the potential to emit any single HAP at a rate of 10 tons or more per year or any combination of HAP at a rate of 25 tons or more per year.

**§ 63.7682 What parts of my foundry does this subpart cover?**

- (a) The affected source is each new or existing iron and steel foundry.
- (b) This subpart covers emissions from metal melting furnaces, scrap preheaters, pouring areas, pouring stations, automated conveyor and pallet cooling lines, automated shakeout lines, and mold and core making lines. This subpart also covers fugitive emissions from foundry operations.
- (c) An affected source is existing if you commenced construction or reconstruction of the affected source before December 23, 2002.
- (d) An affected source is new if you commenced construction or reconstruction of the affected source on or after December 23, 2002. An affected source is reconstructed if it meets the definition of "reconstruction" in §63.2.

**§ 63.7683 When do I have to comply with this subpart?**

- (a) Except as specified in paragraph (b) of this section, if you have an existing affected source, you must comply with each emissions limitation, work practice standard, and operation and maintenance requirement in this subpart that applies to you no later than April 23, 2007. Major source status for existing affected sources must be determined no later than April 23, 2007.
- (b) If you have an existing affected source, you must comply with the work practice standards in §63.7700(b) or (c), as applicable, no later than April 22, 2005.
- (f) You must meet the notification and schedule requirements in §63.7750. Note that several of these notifications must be submitted before the compliance date for your affected source.

**Emissions Limitations**

**§ 63.7690 What emissions limitations must I meet?**

- (a) You must meet each emissions limit or standard in paragraphs (a)(1) through (11) of this section that applies to you.
  - (1) For each electric arc metal melting furnace, electric induction metal melting furnace, or scrap preheater at an existing iron and steel foundry, you must not discharge emissions through a conveyance to the atmosphere that exceed either the limit for particulate matter (PM) in paragraph (a)(1)(i) of this section or, alternatively the limit for total metal HAP in paragraph (a)(1)(ii) of this section:
    - (i) 0.005 grains of PM per dry standard cubic foot (gr/dscf)
  - (5) For each pouring station at an existing iron and steel foundry, you must not discharge emissions through a conveyance to the atmosphere that exceed either the limit for PM in paragraph (a)(5)(i) of this section or, alternatively the limit for total metal HAP in paragraph (a)(5)(ii) of this section:
    - (i) 0.010 gr/dscf of PM
  - (7) For each building or structure housing any emissions source at the iron and steel foundry, you must not discharge any fugitive emissions to the atmosphere that exhibit opacity greater than 20 percent (6-minute average), except for one 6-minute average per hour that does not exceed 27 percent opacity.

**Work Practice Standards**

**§ 63.7700 What work practice standards must I meet?**

- (a) For each segregated scrap storage area, bin or pile, you must either comply with the certification requirements in paragraph (b) of this section, or prepare and implement a plan for the selection and inspection of scrap according to the requirements in paragraph (c) of this section.

You may have certain scrap subject to paragraph (b) of this section and other scrap subject to paragraph (c) of this section at your facility provided the scrap remains segregated until charge make-up.

(b) You must prepare and operate at all times according to a written certification that the foundry purchases and uses only metal ingots, pig iron, slitter, or other materials that do not include post-consumer automotive body scrap, post-consumer engine blocks, post-consumer oil filters, oily turnings, lead components, mercury switches, plastics, or free organic liquids. For the purpose of this paragraph (b), "free organic liquids" is defined as material that fails the paint filter test by EPA Method 9095A, "Paint Filter Liquids Test" (Revision 1, December 1996), as published in EPA Publication SW-846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (incorporated by reference—see §63.14). Any post-consumer engine blocks, post-consumer oil filters, or oily turnings that are processed and/or cleaned to the extent practicable such that the materials do not include lead components, mercury switches, plastics, or free organic liquids can be included in this certification.

## Operation and Maintenance Requirements

### § 63.7710 What are my operation and maintenance requirements?

(a) As required by §63.6(e)(1)(i), you must always operate and maintain your iron and steel foundry, including air pollution control and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by this subpart.

(b) You must prepare and operate at all times according to a written operation and maintenance plan for each capture and collection system and control device for an emissions source subject to an emissions limit in §63.7690(a). Your operation and maintenance plan also must include procedures for igniting gases from mold vents in pouring areas and pouring stations that use a sand mold system. This operation and maintenance plan is subject to approval by the Administrator. Each plan must contain the elements described in paragraphs (b)(1) through (6) of this section.

(1) Monthly inspections of the equipment that is important to the performance of the total capture system (*i.e.*, pressure sensors, dampers, and damper switches). This inspection must include observations of the physical appearance of the equipment (*e.g.*, presence of holes in the ductwork or hoods, flow constrictions caused by dents or accumulated dust in the ductwork, and fan erosion). The operation and maintenance plan must also include requirements to repair the defect or deficiency as soon as practicable.

(3) Preventative maintenance plan for each control device, including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.

(4) A site-specific monitoring plan for each bag leak detection system. For each bag leak detection system that operates on the triboelectric effect, the monitoring plan must be consistent with the recommendations contained in the U.S. Environmental Protection Agency guidance document "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015). This baghouse monitoring plan is subject to approval by the Administrator. The owner or operator shall operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. The plan must address all of the items identified in paragraphs (b)(4)(i) through (v) of this section.

(i) Installation of the bag leak detection system.

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

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

(iv) How the bag leak detection system will be maintained including a routine maintenance schedule and spare parts inventory list.

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

(5) Corrective action plan for each baghouse. The plan must include the requirement that, in the event a bag leak detection system alarm is triggered, you must initiate corrective action to determine the cause of the alarm within 1 hour of the alarm, initiate corrective action to correct

the cause of the problem within 24 hours of the alarm, and complete the corrective action as soon as practicable. Corrective actions taken may include, but are not limited to:

- (i) Inspecting the baghouse for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in emissions.
  - (ii) Sealing off defective bags or filter media.
  - (iii) Replacing defective bags or filter media or otherwise repairing the control device.
  - (iv) Sealing off a defective baghouse compartment.
  - (v) Cleaning the bag leak detection system probe or otherwise repairing the bag leak detection system.
  - (vi) Making process changes.
  - (vii) Shutting down the process producing the PM emissions.
- (6) Procedures for providing an ignition source to mold vents of sand mold systems in each pouring area and pouring station unless you determine the mold vent gases either are not ignitable, ignite automatically, or cannot be ignited due to accessibility or safety issues. You must document and maintain records of this determination. The determination of ignitability, accessibility, and safety may encompass multiple casting patterns provided the castings utilize similar sand-to-metal ratios, binder formulations, and coating materials. The determination of ignitability must be based on observations of the mold vents within 5 minutes of pouring, and the flame must be present for at least 15 seconds for the mold vent to be considered ignited. For the purpose of this determination:
- (i) Mold vents that ignite more than 75 percent of the time without the presence of an auxiliary ignition source are considered to ignite automatically; and
  - (ii) Mold vents that do not ignite automatically and cannot be ignited in the presence of an auxiliary ignition source more than 25 percent of the time are considered to be not ignitable.

#### **General Compliance Requirements**

##### **§ 63.7720 What are my general requirements for complying with this subpart?**

- (a) You must be in compliance with the emissions limitations, work practice standards, and operation and maintenance requirements in this subpart at all times, except during periods of startup, shutdown, or malfunction.
- (b) During the period between the compliance date specified for your iron and steel foundry in §63.7683 and the date when applicable operating limits have been established during the initial performance test, you must maintain a log detailing the operation and maintenance of the process and emissions control equipment.
- (c) You must develop a written startup, shutdown, and malfunction plan according to the provisions in §63.6(e)(3). The startup, shutdown, and malfunction plan also must specify what constitutes a shutdown of a cupola and how to determine that operating conditions are normal following startup of a cupola.

#### **Initial Compliance Requirements**

##### **§ 63.7730 By what date must I conduct performance tests or other initial compliance demonstrations?**

- (a) As required by §63.7(a)(2), you must conduct a performance test no later than 180 calendar days after the compliance date that is specified in §63.7683 for your iron and steel foundry to demonstrate initial compliance with each emissions limitation in §63.7690 that applies to you.
- (b) For each work practice standard in §63.7700 and each operation and maintenance requirement in §63.7710 that applies to you where initial compliance is not demonstrated using a performance test, you must demonstrate initial compliance no later than 30 calendar days after the compliance date that is specified for your iron and steel foundry in §63.7683.

##### **§ 63.7731 When must I conduct subsequent performance tests?**

- (a) You must conduct subsequent performance tests to demonstrate compliance with all applicable PM or total metal HAP, VOHAP, and TEA emissions limitations in §63.7690 for your iron and steel foundry no less frequently than every 5 years. The requirement to conduct

performance tests every 5 years does not apply to an emissions source for which a continuous emissions monitoring system (CEMS) is used to demonstrate continuous compliance.

(b) You must conduct subsequent performance tests to demonstrate compliance with the opacity limit in §63.7690(a)(7) for your iron and steel foundry no less frequently than once every 6 months.

**§ 63.7732 What test methods and other procedures must I use to demonstrate initial compliance with the emissions limitations?**

(a) You must conduct each performance test that applies to your iron and steel foundry according to the requirements in §63.7(e)(1) and the conditions specified in paragraphs (b) through (h) of this section.

(b) To determine compliance with the applicable emissions limit for PM in §63.7690(a)(1) through (6) for a metal melting furnace, scrap preheater, pouring station, or pouring area, follow the test methods and procedures in paragraphs (b)(1) through (5) of this section.

(1) Determine the concentration of PM according to the test methods in 40 CFR part 60, appendix A that are specified in paragraphs (b)(1)(i) through (v) of this section.

(i) Method 1 or 1A to select sampling port locations and the number of traverse points in each stack or duct. Sampling sites must be located at the outlet of the control device (or at the outlet of the emissions source if no control device is present) prior to any releases to the atmosphere.

(ii) Method 2, 2A, 2C, 2D, 2F, or 2G to determine the volumetric flow rate of the stack gas.

(iii) Method 3, 3A, or 3B to determine the dry molecular weight of the stack gas.

(iv) Method 4 to determine the moisture content of the stack gas.

(v) Method 5, 5B, 5D, 5F, or 5I, as applicable, to determine the PM concentration. The PM concentration is determined using only the front-half (probe rinse and filter) of the PM catch.

(2) Collect a minimum sample volume of 60 dscf of gas during each PM sampling run. A minimum of three valid test runs are needed to comprise a performance test.

(4) For electric arc and electric induction metal melting furnaces, sample only when metal is being melted.

(c) To determine compliance with the applicable emissions limit for total metal HAP in §63.7690(a)(1) through (6) for a metal melting furnace, scrap preheater, pouring station, or pouring area, follow the test methods and procedures in paragraphs (c)(1) through (5) of this section.

(1) Determine the concentration of total metal HAP according to the test methods in 40 CFR part 60, appendix A that are specified in paragraphs (c)(1)(i) through (v) of this section.

(i) Method 1 or 1A to select sampling port locations and the number of traverse points in each stack or duct. Sampling sites must be located at the outlet of the control device (or at the outlet of the emissions source if no control device is present) prior to any releases to the atmosphere.

(ii) Method 2, 2A, 2C, 2D, 2F, or 2G to determine the volumetric flow rate of the stack gas.

(iii) Method 3, 3A, or 3B to determine the dry molecular weight of the stack gas.

(iv) Method 4 to determine the moisture content of the stack gas.

(v) Method 29 to determine the total metal HAP concentration.

(2) Collect a minimum sample volume of 60 dscf of gas during each total metal HAP sampling run. A minimum of three valid test runs are needed to comprise a performance test.

(4) For electric arc and electric induction metal melting furnaces, sample only when metal is being melted.

(d) To determine compliance with the opacity limit in §63.7690(a)(7) for fugitive emissions from buildings or structures housing any emissions source at the iron and steel foundry, follow the procedures in paragraphs (d)(1) and (2) of this section.

(1) Using a certified observer, conduct each opacity test according to the requirements in EPA Method 9 (40 CFR part 60, appendix A) and §63.6(h)(5).

(2) Conduct each test such that the opacity observations overlap with the PM performance tests.

(h) To determine compliance with the PM or total metal HAP emissions limits in §63.7690(a)(1) through (6) when one or more regulated emissions sources are combined with either another regulated emissions source subject to a different emissions limit or other non-regulated emissions sources, you may demonstrate compliance using one of the procedures in paragraphs (h)(1) through (3) of this section.

- (1) Meet the most stringent applicable emissions limit for the regulated emissions sources included in the combined emissions stream for the combined emissions stream.
- (2) Use the procedures in paragraphs (h)(2)(i) through (iii) of this section.
  - (i) Determine the volumetric flow rate of the individual regulated streams for which emissions limits apply.
  - (ii) Calculate the flow-weighted average emissions limit, considering only the regulated streams, using Equation 3 of this section, except  $C_w$  is the flow-weighted average emissions limit for PM or total metal HAP in the exhaust stream, gr/dscf; and  $C_i$  is the concentration of PM or total metal HAP in exhaust stream "i", gr/dscf.
  - (iii) Meet the calculated flow-weighted average emissions limit for the regulated emissions sources included in the combined emissions stream for the combined emissions stream.
- (3) Use the procedures in paragraphs (h)(3)(i) through (iii) of this section.
  - (i) Determine the PM or total metal HAP concentration of each of the regulated streams prior to the combination with other exhaust streams or control device.
  - (ii) Measure the flow rate and PM or total metal HAP concentration of the combined exhaust stream both before and after the control device and calculate the mass removal efficiency of the control device using Equation 4 of this section, except  $E_i$  is the mass emissions rate of PM or total metal HAP at the control device inlet, lb/hr and  $E_o$  is the mass emissions rate of PM or total metal HAP at the control device outlet, lb/hr
  - (iii) Meet the applicable emissions limit based on the calculated PM or total metal HAP concentration for the regulated emissions source using Equation 5 of this section:

$$C_{\text{released}} = C_i \times \left( 1 - \frac{\% \text{ reduction}}{100} \right) \quad (\text{Eq. 5})$$

Where:

$C_{\text{released}}$  = Calculated concentration of PM (or total metal HAP) predicted to be released to the atmosphere from the regulated emissions source, in gr/dscf; and  
 $C_i$  = Concentration of PM (or total metal HAP) in the uncontrolled regulated exhaust stream, in gr/dscf.

### § 63.7733 What procedures must I use to establish operating limits?

- (a) For each capture system subject to operating limits in §63.7690(b)(1)(ii), you must establish site-specific operating limits in your operation and maintenance plan according to the procedures in paragraphs (a)(1) through (3) of this section.
  - (1) Concurrent with applicable emissions and opacity tests, measure and record values for each of the operating limit parameters in your capture system operation and maintenance plan according to the monitoring requirements in §63.7740(a).
  - (2) For any dampers that are manually set and remain at the same position at all times the capture system is operating, the damper position must be visually checked and recorded at the beginning and end of each run.
  - (3) Review and record the monitoring data. Identify and explain any times the capture system operated outside the applicable operating limits.
- (e) You may change the operating limits for a capture system, wet scrubber, acid wet scrubber, or combustion device if you meet the requirements in paragraphs (e)(1) through (3) of this section.
  - (1) Submit a written notification to the Administrator of your request to conduct a new performance test to revise the operating limit.
  - (2) Conduct a performance test to demonstrate compliance with the applicable emissions limitation in §63.7690.
  - (3) Establish revised operating limits according to the applicable procedures in paragraphs (a) through (d) of this section.
- (f) You may use a previous performance test (conducted since December 22, 2002) to establish an operating limit provided the test meets the requirements of this subpart.

**§ 63.7734 How do I demonstrate initial compliance with the emissions limitations that apply to me?**

(a) You have demonstrated initial compliance with the emissions limits in §63.7690(a) if:

(1) For each electric arc metal melting furnace, electric induction metal melting furnace, or scrap preheater at an existing iron and steel foundry,

(i) The average PM concentration in the exhaust stream, determined according to the performance test procedures in §63.7732(b), did not exceed 0.005 gr/dscf;

(5) For each pouring station at an existing iron and steel foundry,

(i) The average PM concentration in the exhaust stream, measured according to the performance test procedures in §63.7732(b), did not exceed 0.010 gr/dscf;

(7) For each building or structure housing any emissions source at the iron and steel foundry, the opacity of fugitive emissions discharged to the atmosphere, determined according to the performance test procedures in §63.7732(d), did not exceed 20 percent (6-minute average), except for one 6-minute average per hour that did not exceed 27 percent opacity.

(b) You have demonstrated initial compliance with the operating limits in §63.7690(b) if:

(1) For each capture system subject to the operating limit in §63.7690(b)(1)(ii),

(i) You have established appropriate site-specific operating limits in your operation and maintenance plan according to the requirements in §63.7710(b); and

(ii) You have a record of the operating parameter data measured during the performance test in accordance with §63.7733(a)

**§ 63.7735 How do I demonstrate initial compliance with the work practice standards that apply to me?**

(a) For each iron and steel foundry subject to the certification requirement in §63.7700(b), you have demonstrated initial compliance if you have certified in your notification of compliance status that: "At all times, your foundry will purchase and use only metal ingots, pig iron, slitter, or other materials that do not include post-consumer automotive body scrap, post-consumer engine blocks, post-consumer oil filters, oily turnings, lead components, mercury switches, plastics, or free organic liquids."

**§ 63.7736 How do I demonstrate initial compliance with the operation and maintenance requirements that apply to me?**

(c) For each bag leak detection system, you have demonstrated initial compliance if you have certified in your notification of compliance status that:

(1) You have submitted the bag leak detection system monitoring plan to the Administrator for approval according to the requirements of §63.7710(b);

(2) You will inspect, operate, and maintain each bag leak detection system according to the procedures in the plan; and

(3) You will follow the corrective action procedures for bag leak detection system alarms according to the requirements in the plan.

(d) For each pouring area and pouring station in a new or existing foundry, you have demonstrated initial compliance if you have certified in your notification of compliance status report that:

(1) You have submitted the mold vent ignition plan to the Administrator for approval according to the requirements in §63.7710(b); and

(2) You will follow the procedures for igniting mold vent gases according to the requirements in the plan.

**Continuous Compliance Requirements**

**§ 63.7740 What are my monitoring requirements?**

(b) For each negative pressure baghouse or positive pressure baghouse equipped with a stack that is applied to meet any PM or total metal HAP emissions limitation in this subpart, you must at all times monitor the relative change in PM loadings using a bag leak detection system according to the requirements in §63.7741(b) and conduct inspections at their specified frequencies according to the requirements specified in paragraphs (b)(1) through (8) of this section.

- (1) Monitor the pressure drop across each baghouse cell each day to ensure pressure drop is within the normal operating range identified in the manual.
- (2) Confirm that dust is being removed from hoppers through weekly visual inspections or other means of ensuring the proper functioning of removal mechanisms.
- (3) Check the compressed air supply for pulse-jet baghouses each day.
- (4) Monitor cleaning cycles to ensure proper operation using an appropriate methodology.
- (5) Check bag cleaning mechanisms for proper functioning through monthly visual inspection or equivalent means.
- (6) Make monthly visual checks of bag tension on reverse air and shaker-type baghouses to ensure that bags are not kinked (knead or bent) or lying on their sides. You do not have to make this check for shaker-type baghouses using self-tensioning (spring-loaded) devices.
- (7) Confirm the physical integrity of the baghouse through quarterly visual inspections of the baghouse interior for air leaks.
- (8) Inspect fans for wear, material buildup, and corrosion through quarterly visual inspections, vibration detectors, or equivalent means.

**§ 63.7741 What are the installation, operation, and maintenance requirements for my monitors?**

- (b) You must install, operate, and maintain a bag leak detection system according to the requirements in paragraphs (b)(1) through (7) of this section.
- (1) The system must be certified by the manufacturer to be capable of detecting emissions of particulate matter at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.
  - (2) The bag leak detection system sensor must provide output of relative particulate matter loadings and the owner or operator shall continuously record the output from the bag leak detection system using electronic or other means (*e.g.*, using a strip chart recorder or a data logger).
  - (3) The system must be equipped with an alarm that will sound when an increase in relative particulate loadings is detected over the alarm set point established in the operation and maintenance plan, and the alarm must be located such that it can be heard by the appropriate plant personnel.
  - (4) The initial adjustment of the system must, at minimum, consist of establishing the baseline output by adjusting the sensitivity (range) and the averaging period of the device, and establishing the alarm set points and the alarm delay time (if applicable).
  - (5) Following the initial adjustment, do not adjust the sensitivity or range, averaging period, alarm set point, or alarm delay time without approval from the Administrator. Except, once per quarter, you may adjust the sensitivity of the bag leak detection system to account for reasonable effects including temperature and humidity according to the procedures in the operation and maintenance plan required by §63.7710(b).
  - (6) For negative pressure, induced air baghouses, and positive pressure baghouses that are discharged to the atmosphere through a stack, the bag leak detector sensor must be installed downstream of the baghouse and upstream of any wet scrubber.
  - (7) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.

**§ 63.7742 How do I monitor and collect data to demonstrate continuous compliance?**

- (a) Except for monitoring malfunctions, associated repairs, and required quality assurance or control activities (including as applicable, calibration checks and required zero and span adjustments), you must monitor continuously (or collect data at all required intervals) any time a source of emissions is operating.
- (b) You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emissions or operating levels or to fulfill a minimum data availability requirement, if applicable. You must use all the data collected during all other periods in assessing compliance.

(c) A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

**§ 63.7743 How do I demonstrate continuous compliance with the emissions limitations that apply to me?**

(a) You must demonstrate continuous compliance by meeting the applicable conditions in paragraphs (a)(1) through (12) of this section:

(1) For each electric arc metal melting furnace, electric induction metal melting furnace, or scrap preheater at an existing iron and steel foundry,

(i) Maintaining the average PM concentration in the exhaust stream at or below 0.005 gr/dscf;

(5) For each pouring station at an existing iron and steel foundry,

(i) Maintaining the average PM concentration in the exhaust stream at or below 0.010 gr/dscf;

(7) For each building or structure housing any emissions source at the iron and steel foundry, maintaining the opacity of any fugitive emissions discharged to the atmosphere at or below 20 percent opacity (6-minute average), except for one 6-minute average per hour that does not exceed 27 percent opacity.

(12) Conducting subsequent performance tests at least every 5 years for each emissions source subject to an emissions limit for PM, total metal HAP, VOHAP, or TEA in §63.7690(a) and subsequent performance tests at least every 6 months for each building or structure subject to the opacity limit in §63.7690(a)(7).

(c) For each baghouse equipped with a bag leak detection system,

(1) Maintaining records of the times the bag leak detection system alarm sounded, and for each valid alarm, the time you initiated corrective action, the corrective action taken, and the date on which corrective action was completed; and

(2) Inspecting and maintaining each baghouse according to the requirements of §63.7740(b)(1) through (8) and recording all information needed to document conformance with these requirements.

**§ 63.7744 How do I demonstrate continuous compliance with the work practice standards that apply to me?**

(a) You must maintain records that document continuous compliance with the certification requirements in §63.7700(b) or with the procedures in your scrap selection and inspection plan required in §63.7700(c). Your records documenting compliance with the scrap selection and inspection plan must include a copy (kept onsite) of the procedures used by the scrap supplier for either removing accessible mercury switches or for purchasing automobile bodies that have had mercury switches removed, as applicable.

**§ 63.7745 How do I demonstrate continuous compliance with the operation and maintenance requirements that apply to me?**

(a) For each capture system and control device for an emissions source subject to an emissions limit in §63.7690(a), you must demonstrate continuous compliance with the operation and maintenance requirements of §63.7710 by:

(1) Making monthly inspections of capture systems and initiating corrective action according to §63.7710(b)(1) and recording all information needed to document conformance with these requirements;

(2) Performing preventative maintenance for each control device according to the preventive maintenance plan required by §63.7710(b)(3) and recording all information needed to document conformance with these requirements;

(3) Operating and maintaining each bag leak detection system according to the site-specific monitoring plan required by §63.7710(b)(4) and recording all information needed to demonstrate conformance with these requirements;

(4) Initiating and completing corrective action for a bag leak detection system alarm according to the corrective action plan required by §63.7710(b)(5) and recording all information needed to document conformance with these requirements; and

(5) Igniting gases from mold vents according to the procedures in the plan required by §63.7710(b)(6). (Any instance where you fail to follow the procedures is a deviation that must be included in your semiannual compliance report.)

(b) You must maintain a current copy of the operation and maintenance plans required by §63.7710(b) onsite and available for inspection upon request. You must keep the plans for the life of the iron and steel foundry or until the iron and steel foundry is no longer subject to the requirements of this subpart.

**§ 63.7746 What other requirements must I meet to demonstrate continuous compliance?**

(a) *Deviations.* You must report each instance in which you did not meet each emissions limitation in §63.7690 (including each operating limit) that applies to you. This requirement includes periods of startup, shutdown, and malfunction. You also must report each instance in which you did not meet each work practice standard in §63.7700 and each operation and maintenance requirement of §63.7710 that applies to you. These instances are deviations from the emissions limitations, work practice standards, and operation and maintenance requirements in this subpart. These deviations must be reported according to the requirements of §63.7751.

(b) *Startups, shutdowns, and malfunctions.* (1) Consistent with the requirements of §§63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if you demonstrate to the Administrator's satisfaction that you were operating in accordance with §63.6(e)(1).

(2) The Administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations according to the provisions in §63.6(e).

**Notifications, Reports, and Records**

**§ 63.7750 What notifications must I submit and when?**

(a) You must submit all of the notifications required by §§63.6(h)(4) and (5), 63.7(b) and (c); 63.8(e); 63.8(f)(4) and (6); 63.9(b) through (h) that apply to you by the specified dates.

(b) As specified in §63.9(b)(2), if you start up your iron and steel foundry before April 22, 2004, you must submit your initial notification no later than August 20, 2004.

(d) If you are required to conduct a performance test, you must submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin as required by §63.7(b)(1).

(e) If you are required to conduct a performance test or other initial compliance demonstration, you must submit a notification of compliance status according to the requirements of §63.9(h)(2)(ii).

(1) For each initial compliance demonstration that does not include a performance test, you must submit the notification of compliance status before the close of business on the 30th calendar day following completion of the initial compliance demonstration.

(2) For each initial compliance demonstration that does include a performance test, you must submit the notification of compliance status, including the performance test results, before the close of business on the 60th calendar day following the completion of the performance test according to the requirement specified in §63.10(d)(2).

**§ 63.7751 What reports must I submit and when?**

(a) Compliance report due dates. Unless the Administrator has approved a different schedule, you must submit a semiannual compliance report to your permitting authority according to the requirements specified in paragraphs (a)(1) through (5) of this section.

(1) The first compliance report must cover the period beginning on the compliance date that is specified for your iron and steel foundry by §63.7683 and ending on June 30 or December 31, whichever date comes first after the compliance date that is specified for your iron and steel foundry.

(2) The first compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date comes first after your first compliance report is due.

(3) Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

- (4) Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date comes first after the end of the semiannual reporting period.
- (5) For each iron and steel foundry that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of the dates specified in paragraphs (a)(1) through (4) of this section.
- (b) Compliance report contents. Each compliance report must include the information specified in paragraphs (b)(1) through (3) of this section and, as applicable, paragraphs (b)(4) through (8) of this section.
  - (1) Company name and address.
  - (2) Statement by a responsible official, with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
  - (3) Date of report and beginning and ending dates of the reporting period.
  - (4) If you had a startup, shutdown, or malfunction during the reporting period and you took action consistent with your startup, shutdown, and malfunction plan, the compliance report must include the information in §63.10(d)(5)(i).
  - (5) If there were no deviations from any emissions limitations (including operating limit), work practice standards, or operation and maintenance requirements, a statement that there were no deviations from the emissions limitations, work practice standards, or operation and maintenance requirements during the reporting period.
  - (6) If there were no periods during which a continuous monitoring system (including a CPMS or CEMS) was out-of-control as specified by §63.8(c)(7), a statement that there were no periods during which the CPMS was out-of-control during the reporting period.
  - (7) For each deviation from an emissions limitation (including an operating limit) that occurs at an iron and steel foundry for which you are not using a continuous monitoring system (including a CPMS or CEMS) to comply with an emissions limitation or work practice standard required in this subpart, the compliance report must contain the information specified in paragraphs (b)(1) through (4) and (b)(7)(i) and (ii) of this section. This requirement includes periods of startup, shutdown, and malfunction.
    - (i) The total operating time of each emissions source during the reporting period.
    - (ii) Information on the number, duration, and cause of deviations (including unknown cause) as applicable and the corrective action taken.
  - (8) For each deviation from an emissions limitation (including an operating limit) or work practice standard occurring at an iron and steel foundry where you are using a continuous monitoring system (including a CPMS or CEMS) to comply with the emissions limitation or work practice standard in this subpart, you must include the information specified in paragraphs (b)(1) through (4) and (b)(8)(i) through (xi) of this section. This requirement includes periods of startup, shutdown, and malfunction.
    - (i) The date and time that each malfunction started and stopped.
    - (ii) The date and time that each continuous monitoring system was inoperative, except for zero (low-level) and high-level checks.
    - (iii) The date, time, and duration that each continuous monitoring system was out-of-control, including the information in §63.8(c)(8).
    - (iv) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.
    - (v) A summary of the total duration of the deviations during the reporting period and the total duration as a percent of the total source operating time during that reporting period.
    - (vi) A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and unknown causes.
    - (vii) A summary of the total duration of continuous monitoring system downtime during the reporting period and the total duration of continuous monitoring system downtime as a percent of the total source operating time during the reporting period.
    - (viii) A brief description of the process units.
    - (ix) A brief description of the continuous monitoring system.

- (x) The date of the latest continuous monitoring system certification or audit.
- (xi) A description of any changes in continuous monitoring systems, processes, or controls since the last reporting period.
- (c) Immediate startup, shutdown, and malfunction report. If you had a startup, shutdown, or malfunction during the semiannual reporting period that was not consistent with your startup, shutdown, and malfunction plan, you must submit an immediate startup, shutdown, and malfunction report according to the requirements of §63.10(d)(5)(ii).
- (d) Part 70 monitoring report. If you have obtained a title V operating permit for an iron and steel foundry pursuant to 40 CFR part 70 or 40 CFR part 71, you must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If you submit a compliance report for an iron and steel foundry along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the compliance report includes all the required information concerning deviations from any emissions limitation or operation and maintenance requirement in this subpart, submission of the compliance report satisfies any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report does not otherwise affect any obligation you may have to report deviations from permit requirements for an iron and steel foundry to your permitting authority.

**§ 63.7752 What records must I keep?**

- (a) You must keep the records specified in paragraphs (a)(1) through (4) of this section:
  - (1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any initial notification or notification of compliance status that you submitted, according to the requirements of §63.10(b)(2)(xiv).
  - (2) The records specified in §63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.
  - (3) Records of performance tests and performance evaluations as required by §63.10(b)(2)(viii).
- (c) You must keep the records required by §§63.7743, 63.7744, and 63.7745 to show continuous compliance with each emissions limitation, work practice standard, and operation and maintenance requirement that applies to you.

**§ 63.7753 In what form and for how long must I keep my records?**

- (a) You must keep your records in a form suitable and readily available for expeditious review, according to the requirements of §63.10(b)(1).
- (b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
- (c) You must keep each record onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record according to the requirements in §63.10(b)(1). You can keep the records for the previous 3 years offsite.

**Other Requirements and Information**

**§ 63.7760 What parts of the General Provisions apply to me?**

Table 1 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you.

**§ 63.7761 Who implements and enforces this subpart?**

- (a) This subpart can be implemented and enforced by us, the U.S. Environmental Protection Agency (EPA), or a delegated authority such as your State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency, in addition to the U.S. EPA, has the authority to implement and enforce this subpart. You should contact your U.S. EPA Regional Office to find out if implementation and enforcement of this subpart is delegated to your State, local, or tribal agency.
- (b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under 40 CFR part 63, subpart E, the authorities contained in paragraph (c) of this

section are retained by the Administrator of the U.S. EPA and are not transferred to the State, local, or tribal agency.

(c) The authorities that cannot be delegated to State, local, or tribal agencies are specified in paragraphs (c)(1) through (4) of this section.

(1) Approval of alternatives to non-opacity emissions limitations in §63.7690 and work practice standards in §63.7700 under §63.6(g).

(2) Approval of major alternatives to test methods under §63.7(e)(2)(ii) and (f) and as defined in §63.90.

(3) Approval of major alternatives to monitoring under §63.8(f) and as defined in §63.90.

(4) Approval of major alternatives to recordkeeping and reporting under §63.10(f) and as defined in §63.90.

## Definitions

### § 63.7765 What definitions apply to this subpart?

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

*Automated conveyor and pallet cooling line* means any dedicated conveyor line or area used for cooling molds received from pouring stations.

*Automated shakeout line* means any mechanical process unit designed for and dedicated to separating a casting from a mold. These mechanical processes include, but are not limited to, shaker decks, rotary separators, and high-frequency vibration units. Automated shakeout lines do not include manual processes for separating a casting from a mold, such as personnel using a hammer, chisel, pick ax, sledge hammer, or jackhammer.

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

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

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

*Cold box mold or core making line* means a mold or core making line in which the formed aggregate is hardened by catalysis with a gas.

*Combustion device* means an afterburner, thermal incinerator, or scrap preheater.

*Conveyance* means the system of equipment that is designed to capture pollutants at the source, convey them through ductwork, and exhaust them using forced ventilation. A conveyance may, but does not necessarily include, control equipment designed to reduce emissions of the pollutants. Emissions that are released through windows, vents, or other general building ventilation or exhaust systems are not considered to be discharged through a conveyance.

*Cooling* means the process of molten metal solidification within the mold and subsequent temperature reduction prior to shakeout.

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

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

- (1) Fails to meet any requirement or obligation established by this subpart including, but not limited to, any emissions limitation (including operating limits), work practice standard, or operation and maintenance requirement;
- (2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any iron and steel foundry required to obtain such a permit; or
- (3) Fails to meet any emissions limitation (including operating limits) or work practice standard in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.

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

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

*Emissions limitation* means any emissions limit or operating limit.

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

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

*Fresh acid solution* means a sulfuric acid solution used for the control of triethylamine emissions that has a pH of 2.0 or less.

*Fugitive emissions* means any pollutant released to the atmosphere that is not discharged through a conveyance as defined in this subpart.

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

*Hazardous air pollutant* means any substance on the list originally established in 112(b)(1) of the CAA and subsequently amended as published in the *Code of Federal Regulations*.

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

*Metal melting furnace* means a cupola, electric arc furnace, or electric induction furnace that converts scrap, foundry returns, and/or other solid forms of iron and/or steel to a liquid state. This definition does not include a holding furnace, an argon oxygen decarburization vessel, or ladle

that receives molten metal from a metal melting furnace, to which metal ingots or other material may be added to adjust the metal chemistry.

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

*Mold vent* means an intentional opening in a mold through which gases containing pyrolysis products of organic mold and core constituents produced by contact with or proximity to molten metal normally escape the mold during and after metal pouring.

*Pouring area* means an area, generally associated with floor and pit molding operations, in which molten metal is brought to each individual mold. Pouring areas include all pouring operations that do not meet the definition of a pouring station.

*Pouring station* means the fixed location to which molds are brought in a continuous or semicontinuous manner to receive molten metal, after which the molds are moved to a cooling area.

*Responsible official* means responsible official as defined in §63.2.

*Scrap preheater* means a vessel or other piece of equipment in which metal scrap that is to be used as melting furnace feed is heated to a temperature high enough to eliminate moisture and other volatile impurities or tramp materials by direct flame heating or similar means of heating.

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

*Work practice standard* means any design, equipment, work practice, or operational standard, or combination thereof, that is promulgated pursuant to section 112(h) of the CAA.

**Table 1 to Subpart EEEEE of Part 63—Applicability of General Provisions to Subpart EEEEE**

[As stated in § 63.7760, you must meet each requirement in the following table that applies to you.]

| Citation         | Subject   | Applies to Subpart EEEEE? | Explanation |
|------------------|---|---------------------------|-------------|
| 63.1.....        | Applicability.....                                      | Yes.....                  |             |
| 63.2.....        | Definitions.....  | Yes.....                  |             |
| 63.3.....        | Units and abbreviations                                 | Yes.....                  |             |
| 63.4.....        | Prohibited activities..                                 | Yes.....                  |             |
| 63.5.....        | Construction/reconstruction.                            | Yes.....                  |             |
| 63.6(a)-(g)..... | Compliance with standards and maintenance requirements. | Yes.....                  |             |
| 63.6(h).....     | Opacity and visible emissions standards.                | Yes.....                  |             |

| Citation  | Subject   | Applies to Subpart EEEEE? | Explanation  |
|---|---|---------------------------|--|
| 63.6(i)-(j).....  | Compliance extension and Presidential compliance exemption.               | Yes.....                  |  |
| 63.7(a)(1)-(a)(2).....  | Applicability and performance test dates.                                 | No.....                   | Subpart EEEEE specifies applicability and performance test dates.            |
| 63.7(a)(3), (b)-(h).....  | Performance testing requirements.   | Yes.....                  |  |
| 63.8(a)(1)-(a)(3), (b), (c)(1)-(c)(3), (c)(6)-(c)(8), (d), (e), (f)(1)-(f)(6), (g)(1)-(g)(4). | Monitoring requirements   | Yes.....                  | Subpart EEEEE specifies requirements for alternative monitoring systems.     |
| 63.8(a)(4).....   | Additional monitoring requirements for control devices in §63.11.         | No.....                   | Subpart EEEEE does not require flares.                                       |
| 63.8(c)(4).....   | Continuous monitoring system (CMS) requirements.                          | No.....                   | Subpart EEEEE specifies requirements for operation of CMS and CEMS.          |
| 63.8(c)(5).....   | Continuous opacity monitoring system (COMS) Minimum Procedures.           | No.....                   | Subpart EEEEE does not require COMS.   |
| 63.8(g)(5).....   | Data reduction.....   | No.....                   | Subpart EEEEE specifies data reduction requirements.                         |
| 63.9.....   | Notification requirements.  | Yes.....                  |  |
| 63.10(a)-(b), (c)(1)-(6), (c)(9)-(15), (d)(1)-(2), (e)(1)-(2), (f).                           | Recordkeeping and reporting requirements.                                 | Yes.....                  | Additional records for CMS in §63.10(c)(1)-(6), (9)-(15) apply only to CEMS. |
| 63.10(c)(7)-(8).....  | Records of excess emissions and parameter monitoring exceedances for CMS. | No.....                   | Subpart EEEEE specifies records requirements.                                |
| 63.10(d)(3).....  | Reporting opacity or visible emissions observations.                      | Yes.....                  |  |
| 63.10(e)(3).....  | Excess emissions reports.   | No.....                   | Subpart EEEEE specifies reporting requirements.                              |
| 63.10(e)(4).....  | Reporting COMS data....   | No.....                   | Subpart EEEEE data does not require COMS.                                    |
| 63.11.....  | Control device requirements.  | No.....                   | Subpart EEEEE does not require flares.                                       |

| Citation         | Subject  | Applies to Subpart EEEEE? | Explanation |
|------------------|--|---------------------------|-------------|
| 63.12.....       | State authority and delegations.   | Yes.....                  |             |
| 63.13-63.15..... | Addresses of State air pollution control agencies and EPA regional offices. Incorporation by reference. Availability of information and confidentiality. | Yes.....                  |             |

E.1.3 One Time Deadlines Relating to National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries [40 CFR Part 63, Subpart EEEEE]

The Permittee shall comply with the following requirements by the dates listed:

| Requirement   | Rule Cite      | Affected Facility  | Deadline                      |
|---|----------------|--|-------------------------------|
| Initial performance tests   | 40 CFR 63.7730 | above listed facilities  | 180 days after April 23, 2007 |
| Work Practice Standards   | 40 CFR 63.7700 | above listed facilities  | April 22, 2005                |
| Operation and Maintenance   | 40 CFR 63.7710 | iron and steel foundry, including air pollution control and monitoring equipment | April 23, 2007                |
| Initial Compliance Demonstration for Work Practice Standards                | 40 CFR 63.7730 | above listed facilities  | 30 days after April 22, 2005  |
| Initial Compliance Demonstration for Operation and Maintenance Requirements | 40 CFR 63.7730 | iron and steel foundry, including air pollution control and monitoring equipment | 30 days after April 23, 2007  |

## SECTION E.2

## FACILITY OPERATION CONDITIONS

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

#### Insignificant Activities

- (k) Other activities or categories not previously identified:
- (8) Two (2) fixed roof resin storage tanks, each with a maximum storage capacity of 2,000 gallons [40 CFR 63, Subpart EEEE].

Under the Organic Liquids Distribution (Non-Gasoline) NESHAP (40 CFR 63, Subpart EEEE), the two (2) fixed roof resin storage tanks are considered an existing affected source.

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

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

#### E.2.1 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants under 40 CFR Part 63 [326 IAC 20-1] [40 CFR Part 63, Subpart A]

- (a) Pursuant to 40 CFR 63.2398, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1-1 for the two (2) fixed roof resin storage tanks as specified in Table 12 of 40 CFR 63, Subpart EEEE in accordance with schedule in 40 CFR 63 Subpart EEEE.
- (b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports to:

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

#### E.2.2 Organic Liquids Distribution (Non-Gasoline) NESHAP Requirements [40 CFR Part 63, Subpart EEEE] [326 IAC 20-83]

Pursuant to CFR Part 63, Subpart EEEE, the Permittee shall comply with the provisions of the Organic Liquids Distribution (Non-Gasoline) NESHAP, which are incorporated by reference as 326 IAC 20-83 for the two (2) fixed roof resin storage tanks as specified as follows.

#### What This Subpart Covers

##### § 63.2330 What is the purpose of this subpart?

This subpart establishes national emission limitations, operating limits, and work practice standards for organic hazardous air pollutants (HAP) emitted from organic liquids distribution (OLD) (non-gasoline) operations at major sources of HAP emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations, operating limits, and work practice standards.

##### § 63.2334 Am I subject to this subpart?

- (a) Except as provided in in paragraphs (b) and (c) of this section, you are subject to this subpart if you own or operate an OLD operation that is located at, or is part of, a major source of HAP

emissions. An OLD operation may occupy an entire plant site or be collocated with other industrial ( e.g., manufacturing) operations at the same plant site.

**§ 63.2338 What parts of my plant does this subpart cover?**

- (a) This subpart applies to each new, reconstructed, or existing OLD operation affected source.
- (b) Except as provided in paragraph (c) of this section, the affected source is the collection of activities and equipment used to distribute organic liquids into, out of, or within a facility that is a major source of HAP. The affected source is composed of:
- (1) All storage tanks storing organic liquids.
  - (3) All equipment leak components in organic liquids service that are associated with:
    - (i) Storage tanks storing organic liquids;
    - (iii) Pipelines that transfer organic liquids directly between two storage tanks that are subject to this subpart;
  - (f) An affected source is existing if it is not new or reconstructed.

**§ 63.2342 When do I have to comply with this subpart?**

- (b)(1) If you have an existing affected source, you must comply with the emission limitations, operating limits, and work practice standards for existing affected sources no later than February 5, 2007, except as provided in paragraphs (b)(2) and (3) of this section.
- (d) You must meet the notification requirements in §§63.2343 and 63.2382(a), as applicable, according to the schedules in §63.2382(a) and (b)(1) through (3) and in subpart A of this part. Some of these notifications must be submitted before the compliance dates for the emission limitations, operating limits, and work practice standards in this subpart.

**§ 63.2343 What are my requirements for emission sources not requiring control?**

This section establishes the notification, recordkeeping, and reporting requirements for emission sources identified in §63.2338 that do not require control under this subpart (i.e., under paragraphs (a) through (e) of §63.2346). Such emission sources are not subject to any other notification, recordkeeping, or reporting sections in this subpart, including §63.2350(c), except as indicated in paragraphs (a) through (d) of this section.

- (a) For each storage tank subject to this subpart having a capacity of less than 18.9 cubic meters (5,000 gallons) and for each transfer rack subject to this subpart that only unloads organic liquids (i.e., no organic liquids are loaded at any of the transfer racks), you must keep documentation that verifies that each storage tank and transfer rack identified in paragraph (a) of this section is not required to be controlled. The documentation must be kept up-to-date (i.e., all such emission sources at a facility are identified in the documentation regardless of when the documentation was last compiled) and must be in a form suitable and readily available for expeditious inspection and review according to §63.10(b)(1), including records stored in electronic form in a separate location. The documentation may consist of identification of the tanks and transfer racks identified in paragraph (a) of this section on a plant site plan or process and instrumentation diagram (P&ID).
- (d) If one or more of the events identified in paragraphs (d)(1) through (4) of this section occur since the filing of the Notification of Compliance Status or the last Compliance report, you must submit a subsequent Compliance report as specified in paragraphs (b)(3) and (c)(3) of this section.
- (1) Any storage tank or transfer rack became subject to control under this subpart EEEE; or
  - (2) Any storage tank equal to or greater than 18.9 cubic meters (5,000 gallons) became part of the affected source but is not subject to any of the emission limitations, operating limits, or work practice standards of this subpart; or
  - (3) Any transfer rack (except those racks at which only unloading of organic liquids occurs) became part of the affected source; or
  - (4) Any of the information required in §63.2386(c)(1), §63.2386(c)(2), or §63.2386(c)(3) has changed.

## **Notifications, Reports, and Records**

### **§ 63.2382 What notifications must I submit and when and what information should be submitted?**

(a) You must submit each notification in subpart SS of this part, Table 12 to this subpart, and paragraphs (b) through (d) of this section that applies to you. You must submit these notifications according to the schedule in Table 12 to this subpart and as specified in paragraphs (b) through (d) of this section.

(b)(1) *Initial Notification*. If you startup your affected source before February 3, 2004, you must submit the Initial Notification no later than 120 calendar days after February 3, 2004.

### **§ 63.2390 What records must I keep?**

(a) For each emission source identified in §63.2338 that does not require control under this subpart, you must keep all records identified in §63.2343.

### **§ 63.2394 In what form and how long must I keep my records?**

(a) Your records must be in a form suitable and readily available for expeditious inspection and review according to §63.10(b)(1), including records stored in electronic form at a separate location.

(b) As specified in §63.10(b)(1), you must keep your files of all information (including all reports and notifications) for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). You may keep the records off site for the remaining 3 years.

## **Other Requirements and Information**

### **§ 63.2398 What parts of the General Provisions apply to me?**

Table 12 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you.

### **§ 63.2402 Who implements and enforces this subpart?**

(a) This subpart can be implemented and enforced by the U.S. Environmental Protection Agency (U.S. EPA) or a delegated authority such as your State, local, or eligible tribal agency. If the EPA Administrator has delegated authority to your State, local, or eligible tribal agency, then that agency, as well as the EPA, has the authority to implement and enforce this subpart. You should contact your EPA Regional Office (see list in §63.13) to find out if this subpart is delegated to your State, local, or eligible tribal agency.

(b) In delegating implementation and enforcement authority for this subpart to a State, local, or eligible tribal agency under 40 CFR part 63, subpart E, the authorities contained in paragraphs (b)(1) through (4) of this section are retained by the EPA Administrator and are not delegated to the State, local, or eligible tribal agency.

(1) Approval of alternatives to the nonopacity emission limitations, operating limits, and work practice standards in §63.2346(a) through (c) under §63.6(g).

(2) Approval of major changes to test methods under §63.7(e)(2)(ii) and (f) and as defined in §63.90.

(3) Approval of major changes to monitoring under §63.8(f) and as defined in §63.90.

(4) Approval of major changes to recordkeeping and reporting under §63.10(f) and as defined in §63.90.

### **§ 63.2406 What definitions apply to this subpart?**

Terms used in this subpart are defined in the CAA, in §63.2, 40 CFR part 63, subparts H, PP, SS, TT, UU, and WW, and in this section. If the same term is defined in another subpart and in this section, it will have the meaning given in this section for purposes of this subpart. Notwithstanding

the introductory language in §63.921, the terms “container” and “safety device” shall have the meaning found in this subpart and not in §63.921.

*Actual annual average temperature*, for organic liquids, means the temperature determined using the following methods:

- (1) For heated or cooled storage tanks, use the calculated annual average temperature of the stored organic liquid as determined from a design analysis of the storage tank.
- (2) For ambient temperature storage tanks:
  - (i) Use the annual average of the local (nearest) normal daily mean temperatures reported by the National Climatic Data Center; or
  - (ii) Use any other method that the EPA approves.

*Annual average true vapor pressure* means the equilibrium partial pressure exerted by the total Table 1 organic HAP in the stored or transferred organic liquid. For the purpose of determining if a liquid meets the definition of an organic liquid, the vapor pressure is determined using standard conditions of 77 degrees F and 29.92 inches of mercury. For the purpose of determining whether an organic liquid meets the applicability criteria in Table 2, items 1 through 6, to this subpart, use the actual annual average temperature as defined in this subpart. The vapor pressure value in either of these cases is determined:

- (1) In accordance with methods described in American Petroleum Institute Publication 2517, Evaporative Loss from External Floating-Roof Tanks (incorporated by reference, see §63.14);
- (2) Using standard reference texts;
- (3) By the American Society for Testing and Materials Method D2879–83, 96 (incorporated by reference, see §63.14); or
- (4) Using any other method that the EPA approves.

*Bottoms receiver* means a tank that collects distillation bottoms before the stream is sent for storage or for further processing downstream.

*Cargo tank* means a liquid-carrying tank permanently attached and forming an integral part of a motor vehicle or truck trailer. This term also refers to the entire cargo tank motor vehicle or trailer. For the purpose of this subpart, vacuum trucks used exclusively for maintenance or spill response are not considered cargo tanks.

*Closed vent system* means a system that is not open to the atmosphere and is composed of piping, ductwork, connections, and, if necessary, flow-inducing devices that transport gas or vapors from an emission point to a control device. This system does not include the vapor collection system that is part of some transport vehicles or the loading arm or hose that is used for vapor return. For transfer racks, the closed vent system begins at, and includes, the first block valve on the downstream side of the loading arm or hose used to convey displaced vapors.

*Combustion device* means an individual unit of equipment, such as a flare, oxidizer, catalytic oxidizer, process heater, or boiler, used for the combustion of organic emissions.

*Container* means a portable unit in which a material can be stored, transported, treated, disposed of, or otherwise handled. Examples of containers include, but are not limited to, drums and portable cargo containers known as “portable tanks” or “totes.”

*Control device* means any combustion device, recovery device, recapture device, or any combination of these devices used to comply with this subpart. Such equipment or devices include, but are not limited to, absorbers, adsorbers, condensers, and combustion devices. Primary condensers, steam strippers, and fuel gas systems are not considered control devices.

*Crude oil* means any of the naturally occurring liquids commonly referred to as crude oil, regardless of specific physical properties. Only those crude oils downstream of the first point of custody transfer after the production field are considered crude oils in this subpart.

*Custody transfer* means the transfer of hydrocarbon liquids after processing and/or treatment in the producing operations, or from storage tanks or automatic transfer facilities to pipelines or any other forms of transportation.

*Design evaluation* means a procedure for evaluating control devices that complies with the requirements in §63.985(b)(1)(i).

*Deviation* means any instance in which an affected source subject to this subpart, or portion thereof, or an owner or operator of such a source:

- (1) Fails to meet any requirement or obligation established by this subpart including, but not limited to, any emission limitation (including any operating limit) or work practice standard;
- (2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart, and that is included in the operating permit for any affected source required to obtain such a permit; or
- (3) Fails to meet any emission limitation (including any operating limit) or work practice standard in this subpart during SSM.

*Emission limitation* means an emission limit, opacity limit, operating limit, or visible emission limit.

*Equipment leak component* means each pump, valve, and sampling connection system used in organic liquids service at an OLD operation. Valve types include control, globe, gate, plug, and ball. Relief and check valves are excluded.

*Gasoline* means any petroleum distillate or petroleum distillate/alcohol blend having a Reid vapor pressure of 27.6 kilopascals (4.0 pounds per square inch absolute (psia)) or greater which is used as a fuel for internal combustion engines. Aviation gasoline is included in this definition.

*High throughput transfer rack* means those transfer racks that transfer into transport vehicles (for existing affected sources) or into transport vehicles and containers (for new affected sources) a total of 11.8 million liters per year or greater of organic liquids.

*In organic liquids service* means that an equipment leak component contains or contacts organic liquids having 5 percent by weight or greater of the organic HAP listed in Table 1 to this subpart.

*Low throughput transfer rack* means those transfer racks that transfer into transport vehicles (for existing affected sources) or into transport vehicles and containers (for new affected sources) less than 11.8 million liters per year of organic liquids.

*On-site* or *on site* means, with respect to records required to be maintained by this subpart or required by another subpart referenced by this subpart, that records are stored at a location within a major source which encompasses the affected source. On-site includes, but is not limited to, storage at the affected source to which the records pertain, storage in central files elsewhere at the major source, or electronically available at the site.

*Organic liquid* means:

- (1) Any non-crude oil liquid or liquid mixture that contains 5 percent by weight or greater of the organic HAP listed in Table 1 to this subpart, as determined using the procedures specified in §63.2354(c).
- (2) Any crude oils downstream of the first point of custody transfer.
- (3) Organic liquids for purposes of this subpart do not include the following liquids:
  - (i) Gasoline (including aviation gasoline), kerosene (No. 1 distillate oil), diesel (No. 2 distillate oil), asphalt, and heavier distillate oils and fuel oils;
  - (ii) Any fuel consumed or dispensed on the plant site directly to users (such as fuels for fleet refueling or for refueling marine vessels that support the operation of the plant);
  - (iii) Hazardous waste;

- (iv) Wastewater;
- (v) Ballast water; or
- (vi) Any non-crude oil liquid with an annual average true vapor pressure less than 0.7 kilopascals (0.1 psia).

*Organic liquids distribution (OLD) operation* means the combination of activities and equipment used to store or transfer organic liquids into, out of, or within a plant site regardless of the specific activity being performed. Activities include, but are not limited to, storage, transfer, blending, compounding, and packaging.

*Permitting authority* means one of the following:

- (1) The State Air Pollution Control Agency, local agency, or other agency authorized by the EPA Administrator to carry out a permit program under 40 CFR part 70; or
- (2) The EPA Administrator, in the case of EPA-implemented permit programs under title V of the CAA (42 U.S.C. 7661) and 40 CFR part 71.

*Plant site* means all contiguous or adjoining surface property that is under common control, including surface properties that are separated only by a road or other public right-of-way. Common control includes surface properties that are owned, leased, or operated by the same entity, parent entity, subsidiary, or any combination.

*Research and development facility* means laboratory and pilot plant operations whose primary purpose is to conduct research and development into new processes and products, where the operations are under the close supervision of technically trained personnel, and which are not engaged in the manufacture of products for commercial sale, except in a *de minimis* manner.

*Responsible official* means responsible official as defined in 40 CFR 70.2 and 40 CFR 71.2, as applicable.

*Safety device* means a closure device such as a pressure relief valve, frangible disc, fusible plug, or any other type of device that functions exclusively to prevent physical damage or permanent deformation to a unit or its air emission control equipment by venting gases or vapors directly to the atmosphere during unsafe conditions resulting from an unplanned, accidental, or emergency event.

*Shutdown* means the cessation of operation of an OLD affected source, or portion thereof (other than as part of normal operation of a batch-type operation), including equipment required or used to comply with this subpart, or the emptying and degassing of a storage tank. Shutdown as defined here includes, but is not limited to, events that result from periodic maintenance, replacement of equipment, or repair.

*Startup* means the setting in operation of an OLD affected source, or portion thereof (other than as part of normal operation of a batch-type operation), for any purpose. Startup also includes the placing in operation of any individual piece of equipment required or used to comply with this subpart including, but not limited to, control devices and monitors.

*Storage tank* means a stationary unit that is constructed primarily of nonearthen materials (such as wood, concrete, steel, or reinforced plastic) that provide structural support and is designed to hold a bulk quantity of liquid. Storage tanks do not include:

- (1) Units permanently attached to conveyances such as trucks, trailers, rail cars, barges, or ships;
- (2) Pressure vessels designed to operate in excess of 204.9 kilopascals and without emissions to the atmosphere;
- (3) Bottoms receivers;
- (4) Surge control vessels;
- (5) Vessels storing wastewater; or
- (6) Reactor vessels associated with a manufacturing process unit.

*Tank car* means a car designed to carry liquid freight by rail, and including a permanently attached tank.

*Total actual annual facility-level organic liquid loading volume* means the total facility-level actual volume of organic liquid loaded for transport within or out of the facility through transfer racks that are part of the affected source into transport vehicles (for existing affected sources) or into transport vehicles and containers (for new affected sources) based on a 3-year rolling average, calculated annually.

(1) For existing affected sources, each 3-year rolling average is based on actual facility-level loading volume during each calendar year (January 1 through December 31) in the 3-year period. For calendar year 2004 only (the first year of the initial 3-year rolling average), if an owner or operator of an affected source does not have actual loading volume data for the time period from January 1, 2004, through February 2, 2004 (the time period prior to the effective date of the OLD NESHAP), the owner or operator shall compute a facility-level loading volume for this time period as follows: At the end of the 2004 calendar year, the owner or operator shall calculate a daily average facility-level loading volume (based on the actual loading volume for February 3, 2004, through December 31, 2004) and use that daily average to estimate the facility-level loading volume for the period of time from January 1, 2004, through February 2, 2004. The owner or operator shall then sum the estimated facility-level loading volume from January 1, 2004, through February 2, 2004, and the actual facility-level loading volume from February 3, 2004, through December 31, 2004, to calculate the annual facility-level loading volume for calendar year 2004.

(2)(i) For new affected sources, the 3-year rolling average is calculated as an average of three 12-month periods. An owner or operator must select as the beginning calculation date with which to start the calculations as either the initial startup date of the new affected source or the first day of the calendar month following the month in which startup occurs. Once selected, the date with which the calculations begin cannot be changed.

(ii) The initial 3-year rolling average is based on the projected maximum facility-level annual loading volume for each of the 3 years following the selected beginning calculation date. The second 3-year rolling average is based on actual facility-level loading volume for the first year of operation plus a new projected maximum facility-level annual loading volume for second and third years following the selected beginning calculation date. The third 3-year rolling average is based on actual facility-level loading volume for the first 2 years of operation plus a new projected maximum annual facility-level loading volume for the third year following the beginning calculation date. Subsequent 3-year rolling averages are based on actual facility-level loading volume for each year in the 3-year rolling average.

*Transfer rack* means a single system used to load organic liquids into, or unload organic liquids out of, transport vehicles or containers. It includes all loading and unloading arms, pumps, meters, shutoff valves, relief valves, and other piping and equipment necessary for the transfer operation. Transfer equipment and operations that are physically separate (i.e., do not share common piping, valves, and other equipment) are considered to be separate transfer racks.

*Transport vehicle* means a cargo tank or tank car.

*Vapor balancing system* means: (1) A piping system that collects organic HAP vapors displaced from transport vehicles or containers during loading and routes the collected vapors to the storage tank from which the liquid being loaded originated or to another storage tank connected to a common header. For containers, the piping system must route the displaced vapors directly to the appropriate storage tank or to another storage tank connected to a common header in order to qualify as a vapor balancing system; or (2) a piping system that collects organic HAP vapors displaced from the loading of a storage tank and routes the collected vapors to the transport vehicle from which the storage tank is filled.

*Vapor collection system* means any equipment located at the source (i.e., at the OLD operation) that is not open to the atmosphere; that is composed of piping, connections, and, if necessary, flow-inducing devices; and that is used for:

- (1) Containing and conveying vapors displaced during the loading of transport vehicles to a control device;
- (2) Containing and directly conveying vapors displaced during the loading of containers; or
- (3) Vapor balancing. This does not include any of the vapor collection equipment that is installed on the transport vehicle.

*Vapor-tight transport vehicle* means a transport vehicle that has been demonstrated to be vapor-tight. To be considered vapor-tight, a transport vehicle equipped with vapor collection equipment must undergo a pressure change of no more than 250 pascals (1 inch of water) within 5 minutes after it is pressurized to 4,500 pascals (18 inches of water). This capability must be demonstrated annually using the procedures specified in EPA Method 27 of 40 CFR part 60, appendix A. For all other transport vehicles, vapor tightness is demonstrated by performing the U.S. DOT pressure test procedures for tank cars and cargo tanks.

*Work practice standard* means any design, equipment, work practice, or operational standard, or combination thereof, that is promulgated pursuant to section 112(h) of the CAA.

**Table 1 to Subpart EEEE of Part 63—Organic Hazardous Air Pollutants**

You must use the organic HAP information listed in the following table to determine which of the liquids handled at your facility meet the HAP content criteria in the definition of Organic Liquid in §63.2406.

| Compound name                        | CAS No. <sup>1</sup> |
|--------------------------------------|----------------------|
| 2,4-D salts and esters               | 94-75-7              |
| Acetaldehyde                         | 75-07-0              |
| Acetonitrile                         | 75-05-8              |
| Acetophenone                         | 98-86-2              |
| Acrolein                             | 107-02-8             |
| Acrylamide                           | 79-06-1              |
| Acrylic acid                         | 79-10-7              |
| Acrylonitrile                        | 107-13-1             |
| Allyl chloride                       | 107-05-1             |
| Aniline                              | 62-53-3              |
| Benzene                              | 71-43-2              |
| Biphenyl                             | 92-52-4              |
| Butadiene (1,3-)                     | 106-99-0             |
| Carbon tetrachloride                 | 56-23-5              |
| Chloroacetic acid                    | 79-11-8              |
| Chlorobenzene                        | 108-90-7             |
| 2-Chloro-1,3-butadiene (Chloroprene) | 126-99-8             |
| Chloroform                           | 67-66-3              |

| Compound name                                     | CAS No. <sup>1</sup> |
|---|----------------------|
| m-Cresol  | 108-39-4             |
| o-Cresol  | 95-48-7              |
| p-Cresol  | 106-44-5             |
| Cresols/cresylic acid                             | 1319-77-3            |
| Cumene  | 98-82-8              |
| Dibenzofurans                                     | 132-64-9             |
| Dibutylphthalate                                  | 84-74-2              |
| Dichloroethane (1,2-) (Ethylene dichloride) (EDC) | 107-06-2             |
| Dichloropropene (1,3-)                            | 542-75-6             |
| Diethanolamine                                    | 111-42-2             |
| Diethyl aniline (N,N-)                            | 121-69-7             |
| Diethylene glycol monobutyl ether                 | 112-34-5             |
| Diethylene glycol monomethyl ether                | 111-77-3             |
| Diethyl sulfate                                   | 64-67-5              |
| Dimethyl formamide                                | 68-12-2              |
| Dimethylhydrazine (1,1-)                          | 57-14-7              |
| Dioxane (1,4-) (1,4-Diethyleneoxide)              | 123-91-1             |
| Epichlorohydrin (1-Chloro-2,3-epoxypropane)       | 106-89-8             |
| Epoxybutane (1,2-)                                | 106-88-7             |
| Ethyl acrylate                                    | 140-88-5             |
| Ethylbenzene                                      | 100-41-4             |
| Ethyl chloride (Chloroethane)                     | 75-00-3              |
| Ethylene dibromide (Dibromomethane)               | 106-93-4             |
| Ethylene glycol                                   | 107-21-1             |
| Ethylene glycol dimethyl ether                    | 110-71-4             |
| Ethylene glycol monomethyl ether                  | 109-86-4             |
| Ethylene glycol monomethyl ether acetate          | 110-49-6             |
| Ethylene glycol monophenyl ether                  | 122-99-6             |
| Ethylene oxide                                    | 75-21-8              |
| Ethylidene dichloride (1,1-Dichloroethane)        | 75-34-3              |
| Formaldehyde                                      | 50-00-0              |
| Hexachloroethane                                  | 67-72-1              |

| Compound name                                | CAS No. <sup>1</sup> |
|--|----------------------|
| Hexane                                       | 110-54-3             |
| Hydroquinone                                 | 123-31-9             |
| Isophorone                                   | 78-59-1              |
| Maleic anhydride                             | 108-31-6             |
| Methanol                                     | 67-56-1              |
| Methyl chloride (Chloromethane)              | 74-87-3              |
| Methylene chloride (Dichloromethane)         | 75-09-2              |
| Methylenedianiline (4,4'-)                   | 101-77-9             |
| Methylene diphenyl diisocyanate              | 101-68-8             |
| Methyl hydrazine                             | 60-34-4              |
| Methyl isobutyl ketone (Hexone) (MIBK)       | 108-10-1             |
| Methyl methacrylate                          | 80-62-6              |
| Methyl tert-butyl ether (MTBE)               | 1634-04-4            |
| Naphthalene                                  | 91-20-3              |
| Nitrobenzene                                 | 98-95-3              |
| Phenol                                       | 108-9-52             |
| Phthalic anhydride                           | 85-44-9              |
| Polycyclic organic matter                    | 50-32-8              |
| Propionaldehyde                              | 123-38-6             |
| Propylene dichloride (1,2-Dichloropropane)   | 78-87-5              |
| Propylene oxide                              | 75-56-9              |
| Quinoline                                    | 91-22-5              |
| Styrene                                      | 100-42-5             |
| Styrene oxide                                | 96-09-3              |
| Tetrachloroethane (1,1,2,2-)                 | 79-34-5              |
| Tetrachloroethylene (Perchloroethylene)      | 127-18-4             |
| Toluene                                      | 108-88-3             |
| Toluene diisocyanate (2,4-)                  | 584-84-9             |
| o-Toluidine                                  | 95-53-4              |
| Trichlorobenzene (1,2,4-)                    | 120-82-1             |
| Trichloroethane (1,1,1-) (Methyl chloroform) | 71-55-6              |
| Trichloroethane (1,1,2-) (Vinyl trichloride) | 79-00-5              |

| Compound name                              | CAS No. <sup>1</sup> |
|--|----------------------|
| Trichloroethylene                          | 79-01-6              |
| Triethylamine                              | 121-44-8             |
| Trimethylpentane (2,2,4-)                  | 540-84-1             |
| Vinyl acetate                              | 108-05-4             |
| Vinyl chloride (Chloroethylene)            | 75-01-4              |
| Vinylidene chloride (1,1-Dichloroethylene) | 75-35-4              |
| Xylene (m-)                                | 108-38-3             |
| Xylene (o-)                                | 95-47-6              |
| Xylene (p-)                                | 106-42-3             |
| Xylenes (isomers and mixtures)             | 1330-20-7            |

<sup>1</sup>CAS numbers refer to the Chemical Abstracts Services registry number assigned to specific compounds, isomers, or mixtures of compounds.

**Table 12 to Subpart EEEE of Part 63—Applicability of General Provisions to Subpart EEEE**

As stated in §§63.2382 and 63.2398, you must comply with the applicable General Provisions requirements as follows:

| Citation        | Subject  | Brief description   | Applies to subpart EEEE |
|-----------------|--|---|-------------------------|
| §63.1           | Applicability                                      | Initial applicability determination; Applicability after standard established; Permit requirements; Extensions, Notifications                             | Yes.                    |
| §63.2           | Definitions  | Definitions for part 63 standards   | Yes.                    |
| §63.3           | Units and Abbreviations                            | Units and abbreviations for part 63 standards   | Yes.                    |
| §63.4           | Prohibited Activities and Circumvention            | Prohibited activities; Circumvention, Severability  | Yes.                    |
| §63.5           | Construction/Reconstruction                        | Applicability; Applications; Approvals  | Yes.                    |
| §63.6(a)        | Compliance with Standards/O&M Applicability        | GP apply unless compliance extension; GP apply to area sources that become major  | Yes.                    |
| §63.6(b)(1)–(4) | Compliance Dates for New and Reconstructed Sources | Standards apply at effective date; 3 years after effective date; upon startup; 10 years after construction or reconstruction commences for section 112(f) | Yes.                    |

| Citation        | Subject   | Brief description   | Applies to subpart EEEE  |
|-----------------|---|---|--|
| §63.6(b)(5)     | Notification  | Must notify if commenced construction or reconstruction after proposal  | Yes.   |
| §63.6(b)(6)     | [Reserved].   |   |  |
| §63.6(b)(7)     | Compliance Dates for New and Reconstructed Area Sources That Become Major | Area sources that become major must comply with major source standards immediately upon becoming major, regardless of whether required to comply when they were an area source  | Yes.   |
| §63.6(c)(1)–(2) | Compliance Dates for Existing Sources                                     | Comply according to date in this subpart, which must be no later than 3 years after effective date; for section 112(f) standards, comply within 90 days of effective date unless compliance extension   | Yes.   |
| §63.6(c)(3)–(4) | [Reserved].   |   |  |
| §63.6(c)(5)     | Compliance Dates for Existing Area Sources That Become Major              | Area sources that become major must comply with major source standards by date indicated in this subpart or by equivalent time period (e.g., 3 years)   | Yes.   |
| §63.6(d)        | [Reserved].   |   |  |
| §63.6(e)(1)     | Operation & Maintenance   | Operate to minimize emissions at all times; correct malfunctions as soon as practicable; and operation and maintenance requirements independently enforceable; information Administrator will use to determine if operation and maintenance requirements were met | Yes.   |
| §63.6(e)(2)     | [Reserved].   |   |  |
| §63.6(e)(3)     | SSM Plan  | Requirement for SSM plan; content of SSM plan; actions during SSM   | Yes; however, (1) the 2-day reporting requirement in paragraph §63.6(e)(3)(iv) does not apply and (2) §63.6(e)(3) does not apply to emissions sources not requiring control. |

| <b>Citation</b>  | <b>Subject</b>                     | <b>Brief description</b>   | <b>Applies to subpart EEEE</b>   |
|------------------|------------------------------------|--|--|
| §63.6(f)(1)      | Compliance Except During SSM       | You must comply with emission standards at all times except during SSM   | Yes.   |
| §63.6(f)(2)–(3)  | Methods for Determining Compliance | Compliance based on performance test, operation and maintenance plans, records, inspection   | Yes.   |
| §63.6(g)(1)–(3)  | Alternative Standard               | Procedures for getting an alternative standard   | Yes.   |
| §63.6(h)         | Opacity/Visible Emission Standards | Requirements for compliance with opacity and visible emission standards  | No; except as it applies to flares for which Method 22 observations are required as part of a flare compliance assessment. |
| §63.6(i)(1)–(14) | Compliance Extension               | Procedures and criteria for Administrator to grant compliance extension  | Yes.   |
| §63.6(j)         | Presidential Compliance Exemption  | President may exempt any source from requirement to comply with this subpart   | Yes.   |
| §63.7(a)(2)      | Performance Test Dates             | Dates for conducting initial performance testing; must conduct 180 days after compliance date  | Yes.   |
| §63.7(a)(3)      | Section 114 Authority              | Administrator may require a performance test under CAA section 114 at any time   | Yes.   |
| §63.7(b)(1)      | Notification of Performance Test   | Must notify Administrator 60 days before the test  | Yes.   |
| §63.7(b)(2)      | Notification of Rescheduling       | If you have to reschedule performance test, must notify Administrator of rescheduled date as soon as practicable and without delay   | Yes.   |
| §63.7(c)         | Quality Assurance (QA)/Test Plan   | Requirement to submit site-specific test plan 60 days before the test or on date Administrator agrees with; test plan approval procedures; performance audit requirements; internal and external QA procedures for testing | Yes.   |
| §63.7(d)         | Testing Facilities                 | Requirements for testing facilities  | Yes.   |

| Citation    | Subject                                     | Brief description   | Applies to subpart EEEE  |
|-------------|---|---|--|
| §63.7(e)(1) | Conditions for Conducting Performance Tests | Performance tests must be conducted under representative conditions; cannot conduct performance tests during SSM  | Yes.   |
| §63.7(e)(2) | Conditions for Conducting Performance Tests | Must conduct according to this subpart and EPA test methods unless Administrator approves alternative   | Yes.   |
| §63.7(e)(3) | Test Run Duration                           | Must have three test runs of at least 1 hour each; compliance is based on arithmetic mean of three runs; conditions when data from an additional test run can be used           | Yes; however, for transfer racks per §§63.987(b)(3)(i)(A)–(B) and 63.997(e)(1)(v)(A)–(B) provide exceptions to the requirement for test runs to be at least 1 hour each. |
| §63.7(f)    | Alternative Test Method                     | Procedures by which Administrator can grant approval to use an intermediate or major change, or alternative to a test method  | Yes.   |
| §63.7(g)    | Performance Test Data Analysis              | Must include raw data in performance test report; must submit performance test data 60 days after end of test with the Notification of Compliance Status; keep data for 5 years | Yes; however, performance test data is to be submitted with the Notification of Compliance Status according to the schedule specified in §63.9(h)(1)–(6) below.          |
| §63.7(h)    | Waiver of Tests                             | Procedures for Administrator to waive performance test  | Yes.   |
| §63.8(a)(1) | Applicability of Monitoring Requirements    | Subject to all monitoring requirements in standard  | Yes.   |
| §63.8(a)(2) | Performance Specifications                  | Performance Specifications in appendix B of 40 CFR part 60 apply  | Yes.   |
| §63.8(a)(3) | [Reserved].                                 |   |  |
| §63.8(a)(4) | Monitoring of Flares                        | Monitoring requirements for flares in §63.11  | Yes; however, monitoring requirements in §63.987(c) also apply.  |
| §63.8(b)(1) | Monitoring                                  | Must conduct monitoring according to standard unless Administrator approves alternative   | Yes.   |

| Citation             | Subject  | Brief description  | Applies to subpart EEEE  |
|----------------------|--|--|--|
| §63.8(b)(2)–(3)      | Multiple Effluents and Multiple Monitoring Systems | Specific requirements for installing monitoring systems; must install on each affected source or after combined with another affected source before it is released to the atmosphere provided the monitoring is sufficient to demonstrate compliance with the standard; if more than one monitoring system on an emission point, must report all monitoring system results, unless one monitoring system is a backup | Yes.   |
| §63.8(c)(1)          | Monitoring System Operation and Maintenance        | Maintain monitoring system in a manner consistent with good air pollution control practices  | Yes.   |
| §63.8(c)(1)(i)–(iii) | Routine and Predictable SSM                        | Keep parts for routine repairs readily available; reporting requirements for SSM when action is described in SSM plan.   | Yes.   |
| §63.8(c)(2)–(3)      | Monitoring System Installation                     | Must install to get representative emission or parameter measurements; must verify operational status before or at performance test  | Yes.   |
| §63.8(c)(4)          | CMS Requirements                                   | CMS must be operating except during breakdown, out-of control, repair, maintenance, and high-level calibration drifts; COMS must have a minimum of one cycle of sampling and analysis for each successive 10-second period and one cycle of data recording for each successive 6-minute period; CEMS must have a minimum of one cycle of operation for each successive 15-minute period                              | Yes; however, COMS are not applicable.   |
| §63.8(c)(5)          | COMS Minimum Procedures                            | COMS minimum procedures  | No.  |
| §63.8(c)(6)–(8)      | CMS Requirements                                   | Zero and high level calibration check requirements. Out-of-control periods   | Yes, but only applies for CEMS. 40 CFR part 63, subpart SS provides requirements for CPMS. |

| Citation                 | Subject   | Brief description   | Applies to subpart EEEE  |
|--------------------------|---|---|--|
| §63.8(d)                 | CMS Quality Control   | Requirements for CMS quality control, including calibration, etc.; must keep quality control plan on record for 5 years; keep old versions for 5 years after revisions  | Yes, but only applies for CEMS. 40 CFR part 63, subpart SS provides requirements for CPMS. |
| §63.8(e)                 | CMS Performance Evaluation                                      | Notification, performance evaluation test plan, reports   | Yes, but only applies for CEMS.  |
| §63.8(f)(1)–(5)          | Alternative Monitoring Method                                   | Procedures for Administrator to approve alternative monitoring  | Yes, but 40 CFR part 63, subpart SS also provides procedures for approval of CPMS.         |
| §63.8(f)(6)              | Alternative to Relative Accuracy Test                           | Procedures for Administrator to approve alternative relative accuracy tests for CEMS  | Yes.   |
| §63.8(g)                 | Data Reduction  | COMS 6-minute averages calculated over at least 36 evenly spaced data points; CEMS 1 hour averages computed over at least 4 equally spaced data points; data that cannot be used in average                       | Yes; however, COMS are not applicable.   |
| §63.9(a)                 | Notification Requirements                                       | Applicability and State delegation  | Yes.   |
| §63.9(b)(1)–(2), (4)–(5) | Initial Notifications   | Submit notification within 120 days after effective date; notification of intent to construct/reconstruct, notification of commencement of construction/reconstruction, notification of startup; contents of each | Yes.   |
| §63.9(c)                 | Request for Compliance Extension                                | Can request if cannot comply by date or if installed best available control technology or lowest achievable emission rate (BACT/LAER)   | Yes.   |
| §63.9(d)                 | Notification of Special Compliance Requirements for New Sources | For sources that commence construction between proposal and promulgation and want to comply 3 years after effective date  | Yes.   |
| §63.9(e)                 | Notification of Performance Test                                | Notify Administrator 60 days prior  | Yes.   |
| §63.9(f)                 | Notification of VE/Opacity Test                                 | Notify Administrator 30 days prior  | No.  |

| Citation              | Subject   | Brief description  | Applies to subpart EEEE  |
|-----------------------|---|--|--|
| §63.9(g)              | Additional Notifications When Using CMS               | Notification of performance evaluation; notification about use of COMS data; notification that exceeded criterion for relative accuracy alternative  | Yes; however, there are no opacity standards.  |
| §63.9(h)(1)–(6)       | Notification of Compliance Status                     | Contents due 60 days after end of performance test or other compliance demonstration, except for opacity/visible emissions, which are due 30 days after; when to submit to Federal vs. State authority | Yes; however, (1) there are no opacity standards and (2) all initial Notification of Compliance Status, including all performance test data, are to be submitted at the same time, either within 240 days after the compliance date or within 60 days after the last performance test demonstrating compliance has been completed, whichever occurs first. |
| §63.9(i)              | Adjustment of Submittal Deadlines                     | Procedures for Administrator to approve change in when notifications must be submitted   | Yes.   |
| §63.9(j)              | Change in Previous Information                        | Must submit within 15 days after the change  | No. These changes will be reported in the first and subsequent compliance reports.   |
| §63.10(a)             | Recordkeeping/Reporting                               | Applies to all, unless compliance extension; when to submit to Federal vs. State authority; procedures for owners of more than one source  | Yes.   |
| §63.10(b)(1)          | Recordkeeping/Reporting                               | General requirements; keep all records readily available; keep for 5 years   | Yes.   |
| §63.10(b)(2)(i)–(iv)  | Records Related to Startup, Shutdown, and Malfunction | Occurrence of each for operations (process equipment); occurrence of each malfunction of air pollution control equipment; maintenance on air pollution control equipment; actions during SSM           | Yes.   |
| §63.10(b)(2)(vi)–(xi) | CMS Records   | Malfunctions, inoperative, out-of-control periods  | Yes.   |
| §63.10(b)(2)(xii)     | Records   | Records when under waiver  | Yes.   |

| Citation              | Subject                              | Brief description  | Applies to subpart EEEE  |
|-----------------------|--------------------------------------|--|--|
| §63.10(b)(2)(xiii)    | Records                              | Records when using alternative to relative accuracy test   | Yes.   |
| §63.10(b)(2)(xiv)     | Records                              | All documentation supporting initial notification and notification of compliance status  | Yes.   |
| §63.10(b)(3)          | Records                              | Applicability determinations   | Yes.   |
| §63.10(c)             | Records                              | Additional records for CMS   | Yes.   |
| §63.10(d)(1)          | General Reporting Requirements       | Requirement to report  | Yes.   |
| §63.10(d)(2)          | Report of Performance Test Results   | When to submit to Federal or State authority   | Yes.   |
| §63.10(d)(3)          | Reporting Opacity or VE Observations | What to report and when  | Yes.   |
| §63.10(d)(4)          | Progress Reports                     | Must submit progress reports on schedule if under compliance extension   | Yes.   |
| §63.10(d)(5)          | SSM Reports                          | Contents and submission  | Yes.   |
| §63.10(e)(1)–(2)      | Additional CMS Reports               | Must report results for each CEMS on a unit; written copy of CMS performance evaluation; 2–3 copies of COMS performance evaluation | Yes; however, COMS are not applicable.   |
| §63.10(e)(3)(i)–(iii) | Reports                              | Schedule for reporting excess emissions and parameter monitor exceedance (now defined as deviations)                               | Yes; however, note that the title of the report is the compliance report; deviations include excess emissions and parameter exceedances. |

| Citation                | Subject                                    | Brief description   | Applies to subpart EEEE  |
|-------------------------|--|---|--|
| §63.10(e)(3)(iv)–(v)    | Excess Emissions Reports                   | Requirement to revert to quarterly submission if there is an excess emissions or parameter monitoring exceedance (now defined as deviations); provision to request semiannual reporting after compliance for 1 year; submit report by 30th day following end of quarter or calendar half; if there has not been an exceedance or excess emissions (now defined as deviations), report contents in a statement that there have been no deviations; must submit report containing all of the information in §§63.8(c)(7)–(8) and 63.10(c)(5)–(13) | Yes.   |
| §63.10(e)(3)(vi)–(viii) | Excess Emissions Report and Summary Report | Requirements for reporting excess emissions for CMS (now called deviations); requires all of the information in §§63.10(c)(5)–(13) and 63.8(c)(7)–(8)   | Yes.   |
| §63.10(e)(4)            | Reporting COMS Data                        | Must submit COMS data with performance test data  | No.  |
| §63.10(f)               | Waiver for Recordkeeping/Reporting         | Procedures for Administrator to waive   | Yes.   |
| §63.11(b)               | Flares                                     | Requirements for flares   | Yes; §63.987 requirements apply, and the section references §63.11(b). |
| §63.12                  | Delegation                                 | State authority to enforce standards  | Yes.   |
| §63.13                  | Addresses                                  | Addresses where reports, notifications, and requests are sent   | Yes.   |
| §63.14                  | Incorporation by Reference                 | Test methods incorporated by reference  | Yes.   |
| §63.15                  | Availability of Information                | Public and confidential information   | Yes.   |

E.2.3 One Time Deadlines Relating to National Emission Standards for Hazardous Air Pollutants for Organic Liquids Distribution (Non-Gasoline) [40 CFR Part 63, Subpart EEEE]

---

The Permittee shall comply with the following requirements by the dates listed:

| Requirement          | Rule Cite               | Affected Facility                         | Deadline  |
|----------------------|-------------------------|---|---|
| Initial Notification | 40 CFR<br>63.2382(b)(1) | two (3) fixed roof resin<br>storage tanks | no later than 120<br>calendar days<br>after February 3,<br>2004 |

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
PART 70 OPERATING PERMIT  
CERTIFICATION**

Source Name: INTAT Precision, Inc.  
Source Address: 2148 State Road 3 North, Rushville, Indiana 46173  
Mailing Address: P.O. Box 488, Rushville, Indiana 46173  
Part 70 Permit No.: T139-7531-00011

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

Please check what document is being certified:

- Annual Compliance Certification Letter
- Test Result (specify)
- Report (specify)
- Notification (specify)
- Affidavit (specify)
- Other (specify)

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Phone:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE BRANCH  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251  
Phone: 317-233-0178  
Fax: 317-233-6865**

**PART 70 OPERATING PERMIT  
EMERGENCY OCCURRENCE REPORT**

Source Name: INTAT Precision, Inc.  
Source Address: 2148 State Road 3 North, Rushville, Indiana 46173  
Mailing Address: P.O. Box 488, Rushville, Indiana 46173  
Part 70 Permit No.: T139-7531-00011

**This form consists of 2 pages**

**Page 1 of 2**

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

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

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

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

Page 2 of 2

|   |
|---|
| Date/Time Emergency started:  |
| Date/Time Emergency was corrected:  |
| Was the facility being properly operated at the time of the emergency?    Y    N  |
| 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:  |
| Describe the steps taken to mitigate the problem:   |
| Describe the corrective actions/response steps taken:   |
| Describe the measures taken to minimize emissions:  |
| If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value: |

Form Completed by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

A certification is not required for this report.



## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

### Part 70 Quarterly Report

Source Name: INTAT Precision, Inc.  
 Source Address: 2148 State Road 3 North, Rushville, Indiana 46173  
 Mailing Address: P.O. Box 488, Rushville, Indiana 46173  
 Part 70 Permit No.: T139-7531-00011  
 Facility: Plant 1, Casting Line 2 of gray and ductile iron foundry line constructed in 1988  
 Parameter: PM emissions  
 Limit: The throughput of metal to each of the following facilities shall not exceed 79,000 tons per twelve (12) consecutive month period: melting (P8), inoculation (P11), pouring (P13B), cooling (P14B), shakeout (P16B), casting conveying and desprue (P17B -P22B), and shotblasting (P40 - P42).

QUARTER :

YEAR:

| Month | Facility ID | Column 1                           | Column 2                                       | Column 1 + Column 2                    |
|-------|-------------|------------------------------------|--|--|
|       |             | Metal Throughput This Month (tons) | Metal Throughput for Previous 11 Months (tons) | 12 Month Total Metal Throughput (tons) |
|       | P8          |                                    |  |  |
|       | P11         |                                    |  |  |
|       | P13B        |                                    |  |  |
|       | P14B        |                                    |  |  |
|       | P16B        |                                    |  |  |
|       | P17B - P22B |                                    |  |  |
|       | P40 - P42   |                                    |  |  |
|       | P8          |                                    |  |  |
|       | P11         |                                    |  |  |
|       | P13B        |                                    |  |  |
|       | P14B        |                                    |  |  |
|       | P16B        |                                    |  |  |
|       | P17B - P22B |                                    |  |  |
|       | P40 - P42   |                                    |  |  |

This Quarterly Report form consists of two (2) pages.

This Quarterly Report form consists of two (2) pages.

| Month | Facility ID | Column 1                           | Column 2                                       | Column 1 + Column 2                    |
|-------|-------------|------------------------------------|--|--|
|       |             | Metal Throughput This Month (tons) | Metal Throughput for Previous 11 Months (tons) | 12 Month Total Metal Throughput (tons) |
|       | P8          |                                    |  |  |
|       | P11         |                                    |  |  |
|       | P13B        |                                    |  |  |
|       | P14B        |                                    |  |  |
|       | P16B        |                                    |  |  |
|       | P17B - P22B |                                    |  |  |
|       | P40 - P42   |                                    |  |  |

No deviation occurred in this quarter.

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

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

Attach a signed certification to complete this report.



**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE DATA SECTION**

**Part 70 Quarterly Report**

Source Name: INTAT Precision Inc.  
Source Address: State Road 3 North, Rushville, Indiana 46173  
Mailing Address: P.O. Box 488, Rushville, Indiana 46173  
Part 70 Permit No.: T139-7531-00011  
Facility: Casting Line 2 constructed in 2004  
Parameter: PM and PM10 emissions  
Limit: The throughput of sand to the sand handling operation (P32B- P37B, P39B) shall not exceed 368,667 tons per twelve (12) consecutive month period.

YEAR:

| Month | Column 1                          | Column 2                                      | Column 1 + Column 2                   |
|-------|-----------------------------------|---|---------------------------------------|
|       | Sand Throughput This Month (tons) | Sand Throughput for Previous 11 Months (tons) | 12 Month Total Sand Throughput (tons) |
|       |                                   |   |                                       |
|       |                                   |   |                                       |
|       |                                   |   |                                       |

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

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

Attach a signed certification to complete this report.

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

### Part 70 Quarterly Report

Source Name: INTAT Precision Inc.  
 Source Address: State Road 3 North, Rushville, Indiana 46173  
 Mailing Address: P.O. Box 488, Rushville, Indiana 46173  
 Part 70 Permit No.: T139-7531-00011  
 Facility: Plant 2, ductile iron foundry line constructed in 1997  
 Parameter: PM and PM10 emissions and VOC and CO emissions  
 Limit: (a) The throughput of metal to each of the following facilities shall not exceed 61,500 tons per twelve (12) consecutive month period: melting, pouring and inoculation (1110, 2000, and 1150), holding furnace, casting cooling and conveyor system (2015 and 2020), casting shakeout (3010), Pre-Blast (3055) and Final Blast (3090).  
 (b) The throughput of metal to each of the pouring operation (2000), the casting cooling and conveyor system (2015 and 2020), and the casting shakeout system (3010) shall not exceed 61,500 tons per twelve (12) consecutive month period.

QUARTER :

YEAR:

| Month | Facility ID        | Column 1                           | Column 2                                       | Column 1 + Column 2                    |
|-------|--------------------|------------------------------------|--|--|
|       |                    | Metal Throughput This Month (tons) | Metal Throughput for Previous 11 Months (tons) | 12 Month Total Metal Throughput (tons) |
|       | Melting (1110)     |                                    |  |  |
|       | Inoculation (1150) |                                    |  |  |
|       | Pouring (2000)     |                                    |  |  |
|       | Holding Furnace    |                                    |  |  |
|       | 2015 and 2020      |                                    |  |  |
|       | 3010               |                                    |  |  |
|       | Pre-Blast (3055)   |                                    |  |  |
|       | Final Blast (3090) |                                    |  |  |

This Quarterly Report form consists of two (2) pages.

This Quarterly Report form consists of two (2) pages.

| Month | Facility ID        | Column 1                           | Column 2                                       | Column 1 + Column 2                    |
|-------|--------------------|------------------------------------|--|--|
|       |                    | Metal Throughput This Month (tons) | Metal Throughput for Previous 11 Months (tons) | 12 Month Total Metal Throughput (tons) |
|       | Melting (1110)     |                                    |  |  |
|       | Inoculation (1150) |                                    |  |  |
|       | Pouring (2000)     |                                    |  |  |
|       | Holding Furnace    |                                    |  |  |
|       | 2015 and 2020      |                                    |  |  |
|       | 3010               |                                    |  |  |
|       | Pre-Blast (3055)   |                                    |  |  |
|       | Final Blast (3090) |                                    |  |  |
|       | Melting (1110)     |                                    |  |  |
|       | Inoculation (1150) |                                    |  |  |
|       | Pouring (2000)     |                                    |  |  |
|       | Holding Furnace    |                                    |  |  |
|       | 2015 and 2020      |                                    |  |  |
|       | 3010               |                                    |  |  |
|       | Pre-Blast (3055)   |                                    |  |  |
|       | Final Blast (3090) |                                    |  |  |

9 No deviation occurred in this quarter.

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

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

Attach a signed certification to complete this report.

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

### Part 70 Quarterly Report

Source Name: INTAT Precision Inc.  
Source Address: State Road 3 North, Rushville, Indiana 46173  
Mailing Address: P.O. Box 488, Rushville, Indiana 46173  
Part 70 Permit No.: T139-7531-00011  
Facility: Plant 2, ductile iron foundry line constructed in 1997  
Parameter: PM and PM10 emissions  
Limit: The throughput of sand to the sand & waste sand handling operation (4000, 4140, and 5000) shall not exceed 430,500 tons per twelve (12) consecutive month period.

QUARTER :

YEAR:

| Month | Column 1                                       | Column 2   | Column 1 + Column 2                                |
|-------|--|--|--|
|       | Sand & Waste Sand Throughput This Month (tons) | Sand & Waste Sand Throughput for Previous 11 Months (tons) | 12 Month Total Sand & Waste Sand Throughput (tons) |
|       |  |  |  |
|       |  |  |  |
|       |  |  |  |

9 No deviation occurred in this quarter.

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

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

Attach a signed certification to complete this report.

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

### Part 70 Quarterly Report

Source Name: INTAT Precision, Inc.  
Source Address: 2148 State Road 3 North, Rushville, Indiana 46173  
Mailing Address: P.O. Box 488, Rushville, Indiana 46173  
Part 70 Permit No.: T139-7531-00011  
Facility: Grinding processes (P29 and P30)  
Parameter: PM and PM10 emissions  
Limit: The metal throughput to the grinding processes identified as P29 and P30 shall not exceed 79,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

QUARTER :

YEAR:

| Month   | Column 1                           | Column 2                                       | Column 1 + Column 2                    |
|---------|------------------------------------|--|--|
|         | Metal Throughput This Month (tons) | Metal Throughput for Previous 11 Months (tons) | 12 Month Total Metal Throughput (tons) |
| Month 1 |                                    |  |  |
| Month 2 |                                    |  |  |
| Month 3 |                                    |  |  |

No deviation occurred in this quarter.

Deviation/s occurred in this quarter.

Deviation has been reported on:

Submitted by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE DATA SECTION  
PART 70 OPERATING PERMIT  
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: INTAT Precision, Inc.  
Source Address: 2148 State Road 3 North, Rushville, Indiana 46173  
Mailing Address: P.O. Box 488, Rushville, Indiana 46173  
Part 70 Permit No.: T139-7531-00011

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

Page 1 of 2

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

|  |                               |
|--|-------------------------------|
| <b>Permit Requirement (specify permit condition #)</b> |                               |
| <b>Date of Deviation:</b>                              | <b>Duration of Deviation:</b> |
| <b>Number of Deviations:</b>                           |                               |
| <b>Probable Cause of Deviation:</b>                    |                               |
| <b>Response Steps Taken:</b>                           |                               |
| <b>Permit Requirement (specify permit condition #)</b> |                               |
| <b>Date of Deviation:</b>                              | <b>Duration of Deviation:</b> |
| <b>Number of Deviations:</b>                           |                               |
| <b>Probable Cause of Deviation:</b>                    |                               |
| <b>Response Steps Taken:</b>                           |                               |
| <b>Permit Requirement (specify permit condition #)</b> |                               |
| <b>Date of Deviation:</b>                              | <b>Duration of Deviation:</b> |
| <b>Number of Deviations:</b>                           |                               |
| <b>Probable Cause of Deviation:</b>                    |                               |
| <b>Response Steps Taken:</b>                           |                               |

Form Completed by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

Attach a signed certification to complete this report.

## Indiana Department of Environmental Management Office of Air Quality

### Technical Support Document (TSD) for a Prevention of Significant Deterioration (PSD) Permit and Part 70 Significant Source Modification and Significant Permit Modification.

#### Source Description and Location

|   |   |
|---|---|
| <b>Source Name:</b>                         | <b>INTAT Precision, Inc.</b>                        |
| <b>Source Location:</b>                     | <b>2148 State Road 3 North, Rushville, IN 46173</b> |
| <b>County:</b>                              | <b>Rush</b>   |
| <b>SIC Code:</b>                            | <b>3321</b>   |
| <b>Operation Permit No.:</b>                | <b>T139-7531-00011</b>                              |
| <b>Operation Permit Issuance Date:</b>      | <b>September 2, 2003</b>                            |
| <b>Significant Source Modification No.:</b> | <b>139-22701-00011</b>                              |
| <b>Significant Permit Modification No.:</b> | <b>139-22744-00011</b>                              |
| <b>Permit Reviewer:</b>                     | <b>Trish Earls/EVP</b>                              |

#### Existing Approvals

The source was issued Part 70 Operating Permit No. 139-7531-00011 on September 2, 2003. The source has since received the following approvals:

- (a) Significant Source Modification No. 139-17898-00011, issued on April 6, 2004;
- (b) Significant Permit Modification No. 139-18320-00011, issued on April 26, 2004;
- (c) Administrative Amendment No. 139-19865-00011, issued on March 4, 2005; and
- (d) Significant Permit Modification No. 139-21886-00011, issued on March 17, 2006.

#### County Attainment Status

The source is located in Rush County.

| Pollutant       | Status     |
|-----------------|------------|
| PM10            | Attainment |
| PM2.5           | Attainment |
| SO <sub>2</sub> | Attainment |
| NO <sub>2</sub> | Attainment |
| 8-hour Ozone    | Attainment |
| CO              | Attainment |
| Lead            | Attainment |

- (a) Volatile organic compounds (VOC) and nitrogen oxides (NO<sub>x</sub>) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO<sub>x</sub> emissions are considered when evaluating the rule applicability relating to ozone. Rush County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO<sub>x</sub> emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

- (b) Rush County has been classified as attainment for PM2.5. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM2.5 emissions. Therefore, until the U.S.EPA adopts specific provisions for PSD review for PM2.5 emissions, it has directed states to regulate PM10 emissions as a surrogate for PM2.5 emissions.
- (c) Rush County has been classified as attainment or unclassifiable for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (d) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 revoking the one-hour ozone standard in Indiana.
- (e) Since this source is classified as an iron foundry, it is considered one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1).
- (f) Fugitive Emissions  
 Since this type of operation is in one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3, fugitive emissions are counted toward the determination of PSD and Emission Offset applicability.

|                      |
|----------------------|
| <b>Source Status</b> |
|----------------------|

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

| Pollutant       | Emissions (tons/year) |
|-----------------|-----------------------|
| PM              | Greater than 100      |
| PM10            | Greater than 100      |
| SO <sub>2</sub> | Less than 100         |
| VOC             | Greater than 100      |
| CO              | Less than 100         |
| NO <sub>x</sub> | Less than 100         |

- (a) This existing source is a major stationary source, under PSD (326 IAC 2-2), because a regulated pollutant is emitted at a rate of 100 tons per year or more, and it is one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1).
- (b) These emissions are based upon the previous approvals issued to this source.

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

| HAPs       | Potential To Emit (tons/year) |
|------------|-------------------------------|
| Single HAP | Greater than 10               |
| TOTAL      | Greater than 25               |

This existing source is a major source of HAPs, as defined in 40 CFR 63.41, because HAP emissions are greater than ten (10) tons per year for a single HAP and greater than twenty-five (25) tons per year for a combination of HAPs. Therefore, this source is a major source under Section 112 of the Clean Air Act (CAA).

**Actual Emissions**

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

| <b>Pollutant</b> | <b>Actual Emissions (tons/year)</b> |
|------------------|-------------------------------------|
| PM               | Not reported                        |
| PM2.5            | 36.0                                |
| PM10             | 52.0                                |
| SO <sub>2</sub>  | 1.0                                 |
| VOC              | 47.0                                |
| CO               | Not reported                        |
| NO <sub>x</sub>  | 0.0                                 |
| HAP (Lead)       | 0.20                                |

**Description of Proposed Modification**

The Office of Air Quality (OAQ) has reviewed a modification application, submitted by INTAT Precision, Inc. (INTAT) on February 21, 2006, relating to the following modifications:

- (a) INTAT is subject to the following National Emission Standards for Hazardous Air Pollutants (NESHAPs):
  - (1) 40 CFR 63, Subpart EEEEE for Iron and Steel Foundries, with a compliance date of April 23, 2007;
  - (2) 40 CFR 63, Subpart EEEE for Organic Liquids Distribution, with a compliance date of February 3, 2007; and
  - (3) 40 CFR 63, Subpart MMMM for Surface Coating of Miscellaneous Metal Parts and Products, with a compliance date of January 2, 2007.

INTAT has requested that the applicable requirements of these NESHAPs be incorporated into the Part 70 permit.

- (b) The Part 70 Operating Permit No. 139-7531-00011, issued to INTAT on September 2, 2003 incorrectly describes the iron lines as gray iron lines; however, Plant 2 can only produce ductile iron. Therefore, INTAT has requested the description of the iron line be modified to correct the error in the description.
- (c) Plant 2 iron lines utilize the process of inoculation during the production of ductile iron. The inoculation process is not documented in Part 70 Operating Permit No. 139-7531-00011. Therefore, INTAT has requested Section D.4 be modified to include a description of the inoculation process.

Potential emission calculations for the inoculation operation in Plant 2 have been included in the emission calculations in Appendix A. Since the inoculation operation exhausts through the same dust collector as the melting and pouring operations, and stack tests performed by INTAT in 2003 and 2005 on the dust collector while the inoculation process was in operation indicate compliance with the existing PM, PM10 and VOC PSD Minor limits included in the Part 70 permit for melting and pouring when inoculation emissions are included, the inoculation operation will be included in the existing PM, PM10 and VOC PSD minor limits in the Part 70 permit to render 326 IAC 2-2 not applicable.

- (d) INTAT has discovered that three existing shotblast units and two existing storage tanks were not included in the Part 70 permit and have never been permitted. The following unpermitted unit is located in Plant 1:
- (1) One (1) shotblast unit, identified as Wheelabrator MeshBelt Blast, constructed in 2001, with a maximum capacity of 11.0 tons of metal per hour, with a flow rate of 4,800 cfm, with particulate matter emissions controlled by a baghouse DC-13 and exhausting internally.

The following unpermitted units are located in Plant 2:

- (1) Two shot blast units, identified as Pre-Blast ID #3055 and Final Blast ID #3090, constructed in 1997, each with a maximum capacity of 10 tons of metal per hour, utilizing one (1) baghouse (BH #6030) for particulate control, exhausting to stack ID # 6030A and 6030B.

The units in Plant 2 were installed as part of the original equipment in 1997 and have been operated since that time. INTAT Precision, Inc. has requested that these units be included in the Part 70 permit.

The source also has the following storage tanks:

- (1) Two (2) fixed roof resin storage tanks, each with a maximum storage capacity of 2,000 gallons.
- (e) INTAT has installed a heater to dry the scrap metal in Plant 1. This unit is a natural gas-fired heater rated at 1 MMBtu per hour and is considered an insignificant activity. The heater is only used to dry moisture on the scrap and is only capable of heating the air to approximately 186° F. At such low temperatures, it is not possible to drive off VOCs and therefore, the only emissions from this unit would be from the combustion in the heater. The potential to emit from this heater is below the exemption thresholds specified in 326 IAC 2-1.1-3.

Pursuant to 40 CFR 63.7765, Subpart EEEEE, a scrap preheater means a vessel or other piece of equipment in which metal scrap that is to be used as melting furnace feed is heated to a temperature high enough to eliminate moisture and other volatile impurities or tramp materials by direct flame heating or similar means of heating. Since this heater does not heat the metal to a temperature high enough to eliminate volatile impurities, it does not meet the definition of a scrap preheater under this rule.

- (f) INTAT has also requested that the parametric monitoring requirements found in Conditions D.1.7, D.2.10, D.3.9, and D.4.10 of the Part 70 Permit be revised to reflect a normal range of 0.5 and 8.0 inches of water. The current permit has a range starting at 1.0; however, the pressure drop range on the new bags remains below 1.0 for several months and according to the manufacturer of the bags, this represents the normal range.

INTAT has provided information from the manufacturer as part of the application to verify this range.

- (g) Due to a fire in June 2005 that significantly damaged the Casting Line 1 operations of Plant 1, INTAT has decided that they will not be making the repairs to the line that would be necessary to enable them to resume operations. Therefore, they are requesting that all references to Plant 1 Casting Line 1, with the exception of the grinding operations, be removed from the Part 70 permit. Plant 1 Melting Operations and Plant 1 Casting Line 2 will remain in operation and the grinding operations will be listed with the Casting Line 2 operations.
- (h) INTAT is proposing to change the controls for the Casting Conveyors P17B through P22B, found in section A.2(d)(6) and D.3(d)(6). The permit states that the casting conveyors are currently controlled by baghouses DC-6B, DC-7 and DC-8B. INTAT proposes to reconfigure the equipment such that the casting conveyors are controlled by DC-7, DC-8B and existing baghouse BH1-6200 instead of dust collector DC-6B. Dust Collector DC-6B will be removed from service. The total flow rate through Baghouse BH1-6200 will remain unchanged, at 111,000 cfm, and it will still be able to meet its PM10 BACT limit pursuant to 326 IAC 2-2 (PSD) of 0.003 gr/dscf.
- (i) Since submittal of the original permit application for this Significant Source Modification and Significant Permit Modification, INTAT has requested that the production limit on Plant 1, Casting Line 2 be increased to 79,000 tons per year to meet the growing demands of their automotive clients. The current production limit of 61,500 tons per year was established in Significant Permit Modification No. 139-18320-00011, issued April 6, 2004 to authorize construction of Casting Line 2 to render the requirements of 326 IAC 2-2 (PSD) not applicable for PM emissions and to render the requirements of 326 IAC 2-2 (PSD) and 326 IAC 8-1-6 (BACT) not applicable for VOC emissions. The modification was subject to 326 IAC 2-2 (PSD) for PM10 and the SPM included a PSD review pursuant to 326 IAC 2-2 for PM10 including a PSD BACT assessment and an air quality assessment. The requested increase in the production limit will require the following:
- (1) Emission limits for CO from Plant 1, Casting Line 2 processes to restrict emissions to less than 100 tons per year; and
  - (2) Revisions to the VOC BACT assessments pursuant to 326 IAC 8-1-6 based on the revised metal throughput limit. Also, the stack test results from the test performed in September, 2005 on the pouring, cooling and shakeout operations indicate that at the previous metal throughput limit of 61,500 tons per year, the VOC emissions would also be greater than the PSD significant threshold of 40 tons per year. Therefore, the modification will also be subject to 326 IAC 2-2 (PSD) for VOC emissions since they will be greater than 40 tons per year so the BACT analysis will include a PSD analysis. The detailed BACT analysis is presented in Appendix B. An additional impact analysis is included in Appendix C of this document.

In the PSD BACT analysis that was performed for PM10 in the SPM referenced above, neither the BACT determination nor the PSD modeling were based on the metal throughput limit in the permit. BACT was determined to be the use of dust collectors on all of the production processes with a filterable PM10 emission limit of 0.003 gr/dscf, and hourly limits for each process. There were also filterable plus condensable PM10 emission limits in pounds per ton for each process. The stringency of these limits will in no way be affected by the proposed increase in production. The modeling assessment for PM10 performed in support of the original permit for Casting Line 2 was based on the pound per hour emission limits and as such did not rely on the annual production limit. As such the modeling analysis is still valid even with the proposed increase in annual production.

By increasing the production limit to 79,000, the limited Potential to Emit (PTE) from the Plant 1, Casting Line 2 foundry operations is as follows. PM10 has previously undergone a PSD review in 2004 as discussed above.

| Process/Emission Unit               | PM    | PM10  | SO2  | NOx  | VOC   | CO    |
|-------------------------------------|-------|-------|------|------|-------|-------|
| Plant 1, Line 2 Emissions (tons/yr) | 23.20 | 76.77 | 0.80 | 1.63 | 47.40 | 99.78 |
| PSD Significant Threshold           | 25    | 15    | 40   | 40   | 40    | 100   |

The PTE calculations are shown on pages 8, 13 and 14 of Appendix A to this TSD. The facilities included in the emissions calculations are the Plant 1, Casting Line 2 foundry processes, as well as the natural gas combustion from the ladle heaters, since these units were replaced during the 2004 modifications.

- (j) INTAT has requested approval to revise the VOC limits for the pouring, cooling and shakeout processes on Plant 1, Line 2. Condition D.3.4 of the current permit establishes a VOC limit of 0.8 pounds of VOC per ton of metal from pouring, cooling, shakeout and bad heat shakeout combined to limit VOC emissions to less than 25 tons per year to render 326 IAC 8-1-6 not applicable. However, testing was conducted by INTAT in September, 2005 and the tested emission rate was higher than the VOC limit. Therefore, since the source can not comply with a VOC limit of less than 25 tons per year and VOC emissions from these operations are greater than 40 tons per year, 326 IAC 8-1-6 and 326 IAC 2-2 (PSD) apply and a BACT determination is required. INTAT submitted a BACT analysis for these operations. The detailed BACT analysis is presented in Appendix B.
- (k) There are several permit conditions that INTAT has appealed. After reviewing these conditions, INTAT has requested that the following issues be resolved in this permit modification. Changes mentioned below are changes that IDEM and INTAT have agreed to make as indicated in the Amended Joint Agreement Regarding Stay dated October 6, 2004.
- (1) **INTAT Request:** Conditions D.3.2(c) and D.3.4(c) were both stayed. INTAT requests that these conditions be removed from the permit. Condition D.3.2 limits PM emissions such that PSD is not applicable. The sand throughput limit is redundant and not necessary. The metal throughput production limits and PM emission limitations found in (a) and (b) of the condition adequately limit the PM emissions. The sand throughput limit is unnecessary and should be removed because the VOC emission limits in Condition D.3.4 will be replaced with a BACT limit pursuant to 326 IAC 2-2 (PSD) and 326 IAC 8-1-6 as discussed above.
- IDEM Response:** Since the PM emission limits in condition D.3.2 are expressed as limits in pound per ton of metal throughput with a corresponding metal throughput limit, a limit on sand throughput is not necessary and will be removed from the permit. Since the VOC emission limit in condition D.3.4 will be replaced with a BACT limit pursuant to 326 IAC 2-2 (PSD) and 326 IAC 8-1-6, the sand throughput limit is not necessary and will be removed from the permit.
- (2) **INTAT Request:** Condition D.3.12(a), now numbered as D.3.11(a), was stayed. This condition requires the Permittee to maintain records of the amount of sand and metal throughput. Since INTAT is requesting that the sand throughput be removed, as described above, this condition should be modified to remove the references to the sand throughput.
- IDEM Response:** Since it has been determined that the limit on sand throughput is no longer necessary to limit PM emissions, the record keeping requirements for sand throughput will be removed from condition D.3.11(a).

- (3) **INTAT Request:** Condition D.4.2 was stayed and new limits were proposed. The original limits were intended to establish a minor PSD limit for PM/PM10. The production throughput and emission limits found in the Stay Agreement re-evaluate the emissions on the line. The emissions from the entire line are still limited to less than 100 tons per year, as originally intended, but the emissions and production limits have been adjusted for the individual process. INTAT requested that the permit be revised to reflect the Stay Agreement, as follows:

| Process  | Material  | PM/PM10 Emission Limitation (lb/ton material) | Throughput Limit (tons per 12 consecutive month period) |
|--|-----------|---|---|
| Melting, Pouring and Inoculation (1110, 2000 and 1150)   | Metal     | 0.75  | 61,500  |
| Holding Furnace  | Metal     | 0.10  | 61,500  |
| Mold/Casting Cooling (2015 and 2020)                     | Metal     | 0.65  | 61,500  |
| Shakeout (3010)  | Metal     | 0.90  | 61,500  |
| Sand & Waste Sand Handling System (4000, 4140, and 5000) | Mold Sand | 0.11  | 430,500   |
| Grinding/Cleaning (8000)                                 | Metal     | 0.03  | 48,180  |

**IDEM Response:** Since the issuance of the Stay Agreement, the source has requested additional revisions to these limits to include the two shot blast units (Pre-Blast and Final Blast) that were installed in 1997 but not included in the permit until this review. The limit for melting and pouring will also include inoculation since stack tests indicate that actual PM and PM10 emissions have not exceeded the limit specified. The limit for mold/casting cooling and shakeout will also include the two shot blast units mentioned above since each of these operations is controlled by a common baghouse (BH #6030). The overall PM and PM10 emissions from the units installed in 1997 remain limited to less than 100 tons per year.

- (4) **INTAT Request:** Condition D.2.3 contains limits for Plant 1, Line 1. As stated in the cover letter to the application, Plant 1, Line 1 has been removed from service and INTAT has requested that all references to the line, with the exception of the melt system, holding furnaces, and grinding operations, also be removed. We request that the limits for the remaining operations be revised to be consistent with the limits in the Stay Agreement. These limits re-evaluate the total emissions on the line and will still limit the line as originally intended.

| Process                                    | Material     | PM/PM10 Emission Limitation (lb/ton material) | Throughput Limit (tons per 12 consecutive month period) |
|--|--------------|---|---|
| 6 Ladle Heaters (P10)                      | Metal        | 0.25  | 60,000  |
| 2 Metal Treatment Inoculation Ladles (P11) | Metal        | 0.25  | 60,000  |
| Melting System (P8)                        | Metal Melted | 0.25  | 60,000  |
| Holding Furnace (P9)                       | Metal        | 0.10  | 60,000  |
| Grinding (P29-P30)                         | Metal        | 0.20  | 60,000  |

**IDEM Response:** Since the issuance of the Stay Agreement, the source has requested these limits be removed from the permit. INTAT believes that these limits are no longer valid for these operations. The limit of 60,000 tons of metal poured per year was accepted in order to limit emissions on Plant 1, Line 1 and the original Plant 1, Line 2 to less than the PSD thresholds. Since Line 2 was modified in 2004 and underwent a PSD review and Line 1 has since been removed, the original melt furnace production limit is no longer valid and should be removed.

INTAT has also requested that sections D.2 and D.3 of the permit be consolidated into a common permit section covering most of the plant 2 operations, since emission units covered by section D.2 and D.3 share common control devices.

Since the units listed above share common stacks with the units subject to limits pursuant to 326 IAC 2-2 (PSD), IDEM agrees to remove the limits for the above operations since they are no longer valid. Sections D.2 and D.3 of the Title V permit will be combined as requested.

- (5) **INTAT Request:** The Facility Description found in Sections A.2(b)(1)(C)(1) and D.2(b)(1)(C)(1) is incorrect and should be changed as follows:

Two (2) electric holding furnaces, identified as P9, each with a holding capacity of 50 tons and a total maximum throughput capacity of 100 tons of metal per hour; ~~utilizing two (2) cartridge collectors for particulate control, exhausting to stack ID Nos. 3A and 3B;~~

Likewise, the references to the Holding Furnaces (P9) in Condition D.2.7(b)(1) should be deleted.

**IDEM Response:** The facility description will be revised as requested.

- (6) **INTAT Request:** The Facility Description found in Sections A.2(b)(1)(C)(2) and D.2(b)(1)(C)(2) identifies 6 ladle heaters as part of the Plant 1 melting operations. There are now only four ladle heaters as two were removed when Line 1 was permanently closed. In addition the rated heat input capacities of the ladle heaters are less than the current description and should be revised. The description should be modified to indicate there are only 4 ladle heaters. There are two metal treatment ladle heaters, each with a heat input rate of 1.0 MMBtu/hr; and two pour ladle heaters each with a heat input rate of 0.4 MMBtu/hour.

**IDEM Response:** The facility description will be revised as requested.

- (7) **INTAT Request:** Section D.3 Facility Descriptions. INTAT noted the following inaccuracies in the equipment descriptions:

a. In section (c)(1) the sand system is controlled by a single baghouse BH-6400 exhausting to stack 6400. The reference to a BH1-6300 baghouse should be removed.

b. In section (c)(7) the combined capacity of the three shotblast units should be identified as 9 tons/hour.

- (8) **INTAT Request:** The facility description found in Sections A.2(e)(2)(B) and D.4(e)(2)(B) should be clarified as follows:

One (1) electric holding furnace (**uncontrolled**);

**IDEM Response:** The facility description will be revised as requested.

- (l) INTAT has requested that the following changes be made to the facility descriptions in Section D.4 for the units in Plant 2 to reflect the above requested changes to the Plant 2 operations and to reflect changes to baghouse ID numbers and stack ID numbers:

Plant 2, ~~gray~~ **ductile** iron foundry line, constructed in 1997, consisting of the following:

- (1) One (1) indoor charge handling system, identified as ID #1000A, with a maximum capacity of 10 tons of metal per hour;
- (2) One (1) melting, ~~and~~ **inoculation and** pouring system, identified as ID #~~4000~~ **1110, 1150 and 2000, respectively**, with a maximum capacity of 10 tons of metal per hour, utilizing a baghouse (ID # ~~BH6400~~ **6010**) for particulate control, exhausting to stack ID #~~6400~~ **6010**, consisting of the following equipment:
  - (A) Two (2) electric induction furnaces, each with a maximum capacity of 10 tons of metal per hour;
  - (B) One (1) electric holding furnace;
  - (C) Two (2) natural gas-fired ladle heaters, identified as ID #6600 and 6610, each with a maximum heat input rate of 2 MMBtu per hour;

Note: The maximum throughput of metal for the melting and pouring system is limited to 10 tons of metal per hour by the maximum throughput from the charge handling system of 10 tons of metal per hour and the power control systems at the plant.
- (3) One (1) mold/~~casting-cooling system~~ **machine**, identified as ID #~~2000~~ **2010**, with a maximum capacity of 10 tons of metal per hour and 70 tons of sand per hour, utilizing one (1) baghouse (ID # ~~BH6200~~ **6010**) for particulate control, exhausting to stack ID#s ~~6200A and 6200B~~ **6010**;
- (4) **One (1) casting cooling and conveyor system, identified as #2015 and 2020, respectively, with a maximum capacity of 10 tons of metal per hour and 70 tons of sand per hour, utilizing two (2) baghouses (ID # BH6020 and 6030) for particulate control exhausting to stack ID#s 6020 and 6030A and 6030B;**
- ~~(4)~~(5) One (1) casting shakeout system, identified as ID #~~3000~~ **3010**, with a maximum capacity of 10 tons of metal per hour and 70 tons of sand per hour, utilizing one (1) baghouse (ID #~~BH6200~~ **6030**) for particulate control, exhausting to stack ID#s ~~6200A and 6200B~~ **6030A and 6030B**;
- ~~(5)~~(6) One (1) sand and waste sand handling system, identified as ID #4000, **#4140, and 5000**, with a maximum capacity of 70 tons of sand per hour, utilizing two (2) baghouses (~~BH6300 and BH6400~~ **6020 and 6040**) for particulate control, exhausting to stack ID #s ~~6300 and 6400~~ **6020 and 6040**;
- (7) **Two (2) shot blast units, identified as Pre-Blast ID #3055 and Final Blast ID #3090, each with a maximum capacity of 10 tons of metal per hour, utilizing one (1) baghouse (BH #6030) for particulate control, exhausting to stack ID # 6030A and 6030B;**
- ~~(6)~~(8) One (1) finishing operation, identified as ID #8000, with a maximum capacity of 5.5 tons of metal per hour, consisting of trim presses, uncontrolled.

IDEM will revise the facility descriptions in sections A.2 and D.4 as requested.

- (m) Section D.4, Plant 2 Permit Limits: Plant 2 was originally constructed in 1997 and the permit limitations in Section D.4 of the permit were designed to limited emissions to less than the major source threshold of 100 tons per year for all of the PSD regulated pollutants. The limitations did not include limits for CO emissions from pouring, cooling and shakeout (2000, 2015, 2020 and 3010), however, and INTAT has requested that appropriate limits now be included in the permit to limit CO emissions from Plant 2 to less than 100 tons/year. This section of the permit already includes a production limit of 61,500 tons/year of metal poured. The only other source of CO emissions at Plant 2 are the two (2) 2.0 MMBtu per hour natural gas fired ladle heaters. INTAT requested that the permit include a limit of 3.2 pounds per ton of metal poured for the pouring, cooling and shakeout process at Plant 2. This coupled with the 61,500 ton poured production limit will limit CO emissions to 98.4 tons per year. With the additional 1.41 tons/year potential CO emissions from the two ladle heaters CO emissions from Plant 2 will be limited to less than 100 tons/year. The proposed CO emission limit for the pouring, cooling and shakeout processes at Plant 2 is based on previous CO stack testing performed on these operations in September, 2005 which showed a CO emission rate of 2.3 pounds per ton of metal from the pouring, cooling and shakeout processes combined. The emission limit includes a safety factor to ensure compliance with this limit.

IDEM will include the CO emission limit in the permit as requested.

- (n) INTAT has stated that they no longer use TEA as a catalyst in the core making operations. They have switched to DMIPA, which is not a HAP. Therefore, they have requested that the facility descriptions in sections A.2 and D.1 for the Isocure core machines be revised to remove references to TEA usage and the TEA scrubber which has also been removed.

The emission calculations for the core making operation have been updated to remove all references to the TEA catalyst and wet scrubber. Since all the catalyst is emitted as VOC for both the TEA and DMIPA catalysts, the VOC emissions have not changed as a result of the catalyst change. Since the DMIPA catalyst does not contain HAP, there are no HAP emissions from catalyst usage. IDEM will revise the facility descriptions in sections A.2 and D.1 as requested. Even though the source has switched to DMIPA, which is not a HAP, the source will remain a major source of HAP emissions after this modification.

- (o) Since the source is now subject to the NESHAP, 40 CFR 63, Subparts EEEEE, EEEE, and MMMM, the requirements of 326 IAC 2- 4.1-1 (New Source Toxics Control) do not apply and the manganese limits in condition D.4.5 are no longer required and will be removed.

### **Enforcement Issues**

IDEM is aware that equipment has been constructed and operated prior to receipt of the proper permit. IDEM is reviewing this matter and will take the appropriate action. This proposed approval is intended to satisfy the requirements of the construction permit rules.

Testing was conducted on the Pouring (P13B), Cooling (P14B), Shakeout (P16B) operations in September 2005 and the results showed that these units could not meet the existing VOC emission limit of less than 25 tons per year to render the requirements of 326 IAC 8-1-6 and 326 IAC 2-2 (PSD) not applicable. Since the existing 0.8 pound VOC per ton metal throughput limit has been exceeded and the stack test results indicate that VOC emissions also exceeded the PSD significant threshold of 40 tons per year, the Pouring (P13B), Cooling (P14B), Shakeout (P16B) and bad heat shakeout processes are subject to the Best Available Control Technology (BACT) requirements pursuant to 326 IAC 8-1-6 and 326 IAC 2-2 (PSD). Therefore, the source was in violation of 326 IAC 2-2 (PSD) and 326 IAC 8-1-6.

INTAT Precision, Inc.  
Rushville, Indiana  
Permit Reviewer: TE/EVP

Page 12 of 153  
Source Modification No.: 139-22701-00011  
Permit Modification No.: 139-22744-00011

The source is proposing to install an Advanced Oxidation (AO) system on the pouring, cooling and shakeout processes on Plant 1, Line 2 to comply with BACT requirements pursuant to 326 IAC 2-2 (PSD) and 326 IAC 8-1-6. However, the system won't be fully operational until July, 2008 so the source will continue to operate in violation of both 326 IAC 2-2-3 (PSD BACT) and 326 IAC 8-1-6 (BACT) until the time the AO system is in operation. IDEM is reviewing this matter and will take the appropriate action.

**Emission Calculations**

See Appendix A of this document for detailed emission calculations.

**Permit Level Determination – Part 70**

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

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

| <b>Pollutant</b> | <b>Potential To Emit (tons/year)</b> |
|------------------|--------------------------------------|
| PM               | 2,483.47                             |
| PM10             | 371.02                               |
| SO <sub>2</sub>  | 0.00                                 |
| VOC              | 0.24                                 |
| CO               | 304.41                               |
| NO <sub>x</sub>  | 0.44                                 |

| <b>HAPs</b> | <b>Potential To Emit (tons/year)</b> |
|-------------|--------------------------------------|
| Manganese   | Less than 10                         |
| TOTAL       | Less than 25                         |

Since the issuance of the original Title V permit T139-7531-00011 on September 2, 2003, it has been determined by IDEM, OAQ that the pouring, cooling, and shakeout operations are sources of CO emissions that were not previously identified. Therefore, the emissions above represent the emissions from the shot blasting units and the inoculation operation being added in this modification and CO emissions from pouring, cooling and shakeout operations.

This source modification is subject to 326 IAC 2-7-10.5(f)(1), (2), and (4)(A) and because the modification is subject to 326 IAC 2-2 (PSD), 326 IAC 8-1-6 (New Facilities, General Reduction Requirements), and the potential to emit of PM and PM10 are greater than twenty-five (25) tons per year. Additionally, the modification will be incorporated into the Part 70 Operating Permit through a significant permit modification issued pursuant to 326 IAC 2-7-12 (d), because it is incorporating significant compliance requirements under the NESHAPs 40 CFR 63, Subpart MMMM, Subpart EEEEE, and Subpart EEEE, it is adding a case-by-case VOC emission limit pursuant to 326 IAC 2-2 and does not qualify as a minor permit modification or administrative amendment.

**Permit Level Determination – PSD**

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

**1997 Modification**

| Process/Emission Unit  | Potential to Emit (tons/year) |       |                 |      |       |                      |                      |
|--|-------------------------------|-------|-----------------|------|-------|----------------------|----------------------|
|  | PM                            | PM10  | SO <sub>2</sub> | VOC  | CO    | NO <sub>x</sub>      | Total HAPs           |
| Pre-Blast (3055) 1997 <sup>(1)</sup>   | 44.59                         | 44.59 | 0.00            | 0.00 | 0.00  | 0.00                 | 0.10                 |
| Final Blast (3090) 1997 <sup>(1)</sup>   |                               |       | 0.00            | 0.00 | 0.00  | 0.00                 | 0.10                 |
| Casting cooling/conveyor system (2015 and 2020) and Casting Shakeout (3010) 1997   |                               |       |                 |      |       | 24.60 <sup>(4)</sup> | 98.40 <sup>(5)</sup> |
| Melting and Pouring (1110 and 2000) 1997   | 15.38                         | 15.38 | 0.88            |      |       |                      |                      |
| Inoculation (1150) 1997 <sup>(2)</sup>   |                               |       | 0.00            | 0.22 | 0.00  | 0.00                 | 0.00                 |
| Charge handling operation (1000A), Holding Furnace, Sand & Waste Sand Handling System (4000, 4140, and 5000), and Grinding/Cleaning (8000) 1997 <sup>(3)</sup> | 39.49                         | 39.49 | 0.00            | 0.00 | 0.00  | 0.00                 | 0.05                 |
| Two (2) ladle heaters (6600, 6610) 1997  | 0.03                          | 0.13  | 0.01            | 0.10 | 1.47  | 1.75                 | 0.03                 |
| Insignificant Activities (Surface coating (CO5)) 1997  | 0.03                          | 0.03  | --              | 4.68 | --    | --                   | 0.51                 |
| Total from Modification in 1997  | 99.52                         | 99.62 | 0.89            | 29.6 | 99.87 | 2.19                 | 4.02                 |
| PSD Significant Threshold  | 100                           | 100   | 100             | 100  | 100   | 100                  | N/A                  |

This modification to an existing minor stationary source in 1997 was not major because the emissions increase was less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements did not apply. The source became a major PSD source after the modification in 1997.

- (1) The PM and PM10 emissions included in the table for the Pre-Blast and Final Blast units installed in 1997 also include emissions from the casting cooling/conveyor system (2015 and 2020) and the casting shakeout system (3010) which all exhaust to the same baghouse (#BH6030) and represent the maximum allowable PM and PM10 emissions to render the requirements of 326 IAC 2-2 (PSD) not applicable to the units installed in 1997.
- (2) PM and PM10 emissions included in the table for Inoculation (1150) also include emissions from melting (1110) and pouring (ID 2000) which vent to the same baghouse (#BH6010) and represent maximum allowable PM and PM10 emissions to render 326 IAC 2-2 (PSD) not applicable to the units installed in 1997.

- (3) PM and PM10 emissions from charge handling operation (1000A), Holding Furnace, Sand & Waste Sand Handling System (4000, 4140, and 5000), and Grinding/ Cleaning (8000) represent maximum allowable emissions to render 326 IAC 2-2 (PSD) not applicable to the units installed in 1997.
- (4) Based on the potential to emit of VOCs.
- (5) CO emissions from the Pouring (2000), Casting cooling/conveyor system (2015 and 2020) and Casting Shakeout (3010) are limited to 3.2 pounds per ton of metal throughput so that at a limited metal throughput of 61,500 tons per twelve (12) consecutive month period, CO emissions from the modification in 1997 are limited to less than 100 tons per year to render the requirements of 326 IAC 2-2 (PSD) not applicable. The proposed CO emission limit for the pouring, cooling and shakeout processes at Plant 2 is based on previous CO stack testing performed on these operations in September, 2005 which showed a CO emission rate of 2.3 pounds per ton of metal from the pouring, cooling and shakeout processes combined. The emission limit includes a safety factor to ensure compliance with this limit.

The Pre-Blast and Final Blast units installed in 1997 will be included in the PM/PM10 PSD minor limits for units installed in 1997 which have been adjusted to include these units so that the modification to the existing minor source in 1997 was not a major modification. The revised limits are as follows:

| Process  | Material  | Control Device ID | PM/PM10 Emission Limitation (lb/ton material) | Throughput Limit (tons per 12 consecutive month period) |
|--|-----------|-------------------|---|---|
| Melting, Pouring and Inoculation (1110, 2000, and 1150)  | Metal     | 6010              | 0.50  | 61,500 (metal)  |
| Holding Furnace  | Metal     | NA                | 0.10  | 61,500 (metal)  |
| Casting Shakeout (3010)                                  | Metal     | 6030              | 1.45 (for control device 6030)                | 61,500 (metal)  |
| Pre-Blast (3055) and Final Blast (3090)                  | Metal     | 6030              |   |   |
| Mold/Casting Cooling (2010, 2015, and 2020)              | Metal     | 6020, 6030        |   |   |
| Sand & Waste Sand Handling System (4000, 4140, and 5000) | Mold Sand | 6020, 6040        | 0.11 (for control device 6020)                | 430,500 (sand) <sup>(1)</sup>                           |
|  |           |                   | 0.05 (for control device 6040)                |   |
| Grinding/Cleaning (8000)                                 | Metal     | FFA - FFE         | 0.06  | 48,180 (metal)  |

(1) Throughput limit is a combined limit for the sand & waste sand handling system, which is control by two (2) baghouses identified as 6020 and 6040.

**2001 Modification**

| Process/Emission Unit              | Potential to Emit (tons/year) |      |                 |      |      |                 |            |
|------------------------------------|-------------------------------|------|-----------------|------|------|-----------------|------------|
|                                    | PM                            | PM10 | SO <sub>2</sub> | VOC  | CO   | NO <sub>x</sub> | Total HAPs |
| MeshBelt Blast 2001 <sup>(1)</sup> | 24.9                          | 14.9 | 0.00            | 0.00 | 0.00 | 0.00            | 0.11       |
| PSD Significant Threshold          | 25                            | 15   | 40              | 40   | 100  | 40              | N/A        |

This modification to an existing major stationary source in 2001 was not major because the emissions increase was less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements did not apply.

- (1) PM and PM10 emissions from the MeshBelt Blast unit will be limited to less than 25 and 15 tons per year, respectively, to render the requirements of 326 IAC 2-2 (PSD) not applicable to the modification to a major PSD source in 2001.

The MeshBlast unit is the only unit installed in 2001. Since the unrestricted potential to emit of PM and PM10 from this unit are greater than 25 and 15 tons per year, respectively, but controlled emissions are less than these thresholds, the potential to emit from the MeshBelt Blast unit will be limited as follows:

- (a) The PM emission rate from the one (1) MeshBelt Blast unit, controlled by baghouse DC-13, shall not exceed 5.7 pounds per hour.
- (b) The PM10 emission rate from the one (1) MeshBelt Blast unit shall not exceed 3.40 pounds per hour.

Compliance with these emission limits will ensure that the potential to emit from the modification to the existing major source in 2001 is less than twenty-five (25) tons of PM per year and less than fifteen (15) tons of PM10 per year and therefore will render the requirements of 326 IAC 2-2 not applicable.

**2004 Modification**

| Process/Emission Unit  | Potential to Emit (tons/year) |                      |                 |                      |                      |                 | Total HAPs           |
|--|-------------------------------|----------------------|-----------------|----------------------|----------------------|-----------------|----------------------|
|  | PM                            | PM10                 | SO <sub>2</sub> | VOC                  | CO                   | NO <sub>x</sub> |                      |
| Pouring (P13B), cooling (P14B), shakeout (P16B) and bad heat shakeout 2004 | 23.17 <sup>(1)</sup>          | 76.77 <sup>(2)</sup> | 1.31            | 47.40 <sup>(3)</sup> | 99.78 <sup>(4)</sup> | 1.89            | 18.74 <sup>(5)</sup> |
| PSD Significant Threshold  | 25                            | 15                   | 40              | 40                   | 100                  | 40              | N/A                  |

This modification to an existing major stationary source in 2004 was not major for PM, SO<sub>2</sub>, VOC, CO or NO<sub>x</sub> emissions because the emissions increase was less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements did not apply to these pollutants. However, stack test results from a test performed on the pouring, cooling and shakeout operations in September, 2005, indicated that the existing 0.8 pound VOC per ton metal throughput limit was exceeded and that VOC emissions also exceeded the PSD significant threshold of 40 tons per year making them now subject to 326 IAC 2-2 (PSD).

- (1) PM emissions from Pouring (P13B), cooling (P14B), shakeout (P16B) and bad heat shakeout also include melting (P8), inoculation (P11), conveying (P17B, P18B, P19B, P20B, P21B, P22B), shotblast (P40, 41, & 42), and sand handling (P32B - P37B & P39B) operations of Plant 1, Line 2 and represent allowable emissions to render 326 IAC 2-2 (PSD) not applicable for PM.
- (2) PM10 emissions from Pouring (P13B), cooling (P14B), shakeout (P16B) and bad heat shakeout also include melting (P8), inoculation (P11), conveying (P17B, P18B, P19B, P20B, P21B, P22B), shotblast (P40, 41, & 42), and sand handling (P32B - P37B & P39B) operations of Plant 1, Line 2 and represent allowable emissions pursuant to 326 IAC 2-2-3 (PSD BACT).

The modification in 2004 was a major modification under 326 IAC 2-2 for PM10 emissions. The following emission limits were determined to be BACT under 326 IAC 2-2 (PSD) as permitted under PSD First Significant Source Modification No. 139-17898-00011, issued on April 6, 2004 and PSD First Significant Permit Modification No. 139-18320-00011, issued on April 26, 2004:

Pursuant to 326 IAC 2-2-3, the Permittee shall comply with the following BACT required emission limits for PM10 from the Plant 1, Casting Line 2 processes (PM10 limits include both filterable and condensable).

| Stack No.               | Process   | Collector Air Flow Rate (cu. ft /min) | Filterable PM10 Emission Limitation |         | Total PM10 Emission Limitation (lb/ton) (Filterable & Condensable) |
|-------------------------|---|---------------------------------------|-------------------------------------|---------|--|
|                         |   |                                       | (gr/dscf)                           | (lb/hr) |  |
| 3A                      | Melt (P8) & Metal Treatment (P11)   | 66,225                                | 0.003                               | 1.7     | 0.633 lb/ton metal   |
| 3B                      | Pouring (P13B), Melt (P8) & Metal Treatment (P11)   | 66,225                                | 0.003                               | 1.7     | 0.633 lb/ton metal   |
| 1-6400                  | Sand Handling (P32B-P37B & P39B)  | 44,000                                | 0.003                               | 1.13    | 0.02 lb/ton sand   |
| 1-6200                  | Casting Cooling (P14B), Shakeout (P16B), Casting conveying (P17B, P18B, P19B, P20B, P21B, P22B) | 111,000                               | 0.003                               | 2.85    | 1.045 lb/ton metal   |
| DC-8B (exhausts inside) | Shotblast (P40, P41, & P42) & Casting conveying (P17B, P18B, P19B, P20B, P21B, P22B)            | 40,000                                | 0.003                               | 1.03    | 0.085 lb/ton metal   |
| DC-7 (exhausts inside)  | Casting conveying (P17B, P18B, P19B, P20B, P21B, P22B)  | 21,300                                | 0.003                               | 0.55    | 0.085 lb/ton metal   |
| 5                       | Bad Heat Shakeout   | 17,400                                | 0.003                               | 0.45    | 0.03 lb/ton metal  |

- (3) In the 2004 modification INTAT proposed a VOC limit of 0.8 pounds of VOC per ton of metal from pouring, cooling, shakeout and bad heat shakeout combined to limit VOC emissions to less than 25 tons per year to render 326 IAC 8-1-6 (BACT) not applicable. However, testing was conducted by INTAT in September, 2005 and the tested emission rate was higher than the 0.8 pounds of VOC per ton of metal limit. Therefore, since the source was not able to comply with the VOC limit, the potential to emit of VOCs from the pouring, cooling, shakeout and bad heat shakeout are greater than 40 tons per year and the requirements of both 326 IAC 2-2 (PSD) and 326 IAC 8-1-6 apply. In the BACT analysis attached to this modification, the following has been determined to be BACT for the Pouring (P13B), Cooling (P14B), Shakeout (P16B) and bad heat shakeout processes:
- (a) The use of Material Substitution and Lower-Emitting Processes/Practices to limit VOC emissions;
  - (b) The installation of an of Advanced Oxidation (AO) system with a minimum VOC reduction efficiency of 20%; and
  - (c) A VOC emission limit of 1.2 pounds per ton of metal throughput to the pouring, cooling and shakeout operations (P13B, P14B, and P16B) and bad heat shakeout operations combined.
  - (d) The throughput of metal to the pouring, cooling and shakeout operations (P13B, P14B, and P16B) and bad heat shakeout operations combined shall not exceed 79,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Refer to Appendix B for a detailed description of the BACT analysis.

- (4) CO emissions represent maximum allowable emissions from pouring, cooling and shakeout such that when combined with the potential to emit of other units installed in 2004 the CO emissions are limited to less than 100 tons per year to render 326 IAC 2-2 (PSD) not applicable. Since the unrestricted potential to emit of CO from the Pouring (P13B), cooling (P14B), shakeout (P16B) and bad heat shakeout operations are greater than 100 tons per year, but actual CO emissions are less than 100 tons per year, a limit for CO emissions from the Pouring (P13B), cooling (P14B), shakeout (P16B) and bad heat shakeout operations will be added to the Part 70 permit to render the requirements of 326 IAC 2-2 (PSD) not applicable to the units installed in 2004 for CO emissions.

The proposed CO emission limit for the pouring, cooling and shakeout processes at Plant 2 is based on previous CO stack testing performed on these operations in September, 2005 which showed a CO emission rate of 2.3 pounds per ton of metal from the pouring, cooling and shakeout processes combined. The emission limit includes a safety factor to ensure compliance with this limit. The limit is as follows:

- (a) CO emissions from the Pouring (P13B), cooling (P14B), shakeout (P16B) and bad heat shakeout operations combined shall not exceed 2.5 pounds of CO per ton of metal throughput.
- (b) The throughput of metal to each of the Pouring (P13B), cooling (P14B), shakeout (P16B) and bad heat shakeout operations combined shall not exceed 79,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

The metal throughput limit and the CO emission limits yield CO emissions from the units installed in 2004 that are less than 100 tons per year. Therefore, the requirements of 326 IAC 2-2 (PSD) do not apply for CO.

- (5) Total HAP emissions from pouring, cooling, and shakeout include both metallic and organic HAP emissions and are taken from PSD First Significant Source Modification No. 139-17898-00011, issued on April 6, 2004 and PSD First Significant Permit Modification No. 139-18320-00011, issued on April 26, 2004.

#### Federal Rule Applicability Determination

The following federal rules are applicable to the source:

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this proposed modification.
- (b) This source is subject to the National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries (40 CFR 63.7680 through 63.7765, Subpart EEEEE), which is incorporated by reference as 326 IAC 20-92. The emission units subject to this rule include the following:
- (1) Plant 1 Melting Operations originally constructed in 1988 and modified in 2004, consisting of:
- (A) One (1) melting system, identified as P8, with a maximum capacity of 20 tons of metal per hour, consisting of three (3) electric induction furnaces, each with a melting capacity of 10 tons per hour, utilizing two (2) cartridge collectors, identified as DC-3A and DC-3B, for particulate control, exhausting to stack ID Nos. 3A and 3B;

Note: The maximum throughput of metal for the melting system is limited to 20 tons per hour by the maximum throughput from the charge handling system of 20 tons of metal per hour.

- (B) One (1) holding system consisting of the following equipment:
  - (a) Two (2) electric holding furnaces, identified as P9, each with a holding capacity of 50 tons and a total maximum throughput capacity of 100 tons of metal per hour;
  - (b) Two (2) natural gas-fired metal treatment ladle heaters each with a rated capacity of 1.0 MMBtu/hr.
  - (c) Two (2) natural gas-fired pouring ladle heaters, each with a rated capacity of 0.4 MMBtu/hr.
  
- (2) Plant 1, Casting Line 2, constructed in 2004, with a capacity of 15 tons of metal per hour and 70 tons of sand per hour consisting of the following equipment:
  - (A) One (1) pouring station identified as P13B controlled by dust collector DC3B, exhausting to stack 3B.
  - (B) One (1) cooling line identified as P14B, controlled by baghouse BH1-6200, exhausting to stack 1-6200.
  
- (3) Plant 2, ductile iron foundry line, constructed in 1997, consisting of the following:
  - (A) One (1) melting and pouring system, identified as ID # 1110 and 2000, respectively, with a maximum capacity of 10 tons of metal per hour, utilizing a baghouse (ID # BH6010) for particulate control, exhausting to stack ID # 6010, consisting of the following equipment:
    - (1) Two (2) electric induction furnaces, each with a maximum capacity of 10 tons of metal per hour;
    - (2) One (1) electric holding furnace (uncontrolled);
    - (3) Two (2) natural gas-fired ladle heaters, identified as ID # 6600 and 6610, each with a maximum heat input rate of 2 MMBtu per hour;

Note: The maximum throughput of metal for the melting and pouring system is limited to 10 tons per hour by the maximum throughput from the charge handling system of 10 tons of metal per hour and the power control systems at the plant.
  - (B) One (1) mold machine, identified as ID #2010, with a maximum capacity of 10 tons of metal per hour and 70 tons of sand per hour, utilizing one (1) baghouse (ID # BH6010) for particulate control, exhausting to stack ID# 6010; and
  - (C) One (1) casting cooling and conveyor system, identified as #2015 and 2020, respectively, with a maximum capacity of 10 tons of metal per hour and 70 tons of sand per hour, utilizing two (2) baghouses (ID # BH6020 and 6030) for particulate control exhausting to stack ID#s 6020 and 6030A and 6030B.

Under the Iron and Steel Foundries NESHAP (40 CFR 63, Subpart EEEEE), the above facilities are considered an existing affected source.

The compliance date for the Iron and Steel Foundries NESHAP, 40 CFR 63, Subpart EEEEE is April 23, 2007.

The requirements of 40 CFR 63, Subpart EEEEE only apply to triethylamine (TEA) cold box mold or core making lines at iron and steel foundries. The four (4) isocure cold box core machines, identified as P4, P5, P6 and P7, now use DMIPA as a catalyst and no longer use TEA as a catalyst, therefore, the requirements of this rule are not included in this modification for the core making operation.

Pursuant to 40 CFR 63.7765, Subpart EEEEE, a scrap preheater means a vessel or other piece of equipment in which metal scrap that is to be used as melting furnace feed is heated to a temperature high enough to eliminate moisture and other volatile impurities or tramp materials by direct flame heating or similar means of heating. Since the heater the source has installed to dry the scrap metal in Plant 1 does not heat the metal to a temperature high enough to eliminate volatile impurities, it does not meet the definition of a scrap preheater under this rule.

The requirements of 40 CFR 63, Subpart EEEEE only apply to automated shakeout lines that use a sand mold system at a new iron and steel foundry. Since this is an existing iron and steel foundry, the requirements of this rule are not included in this modification for the shakeout processes at this source.

Nonapplicable portions of the NESHAP will not be included in the permit. The emission units are subject to the following portions of Subpart EEEEE:

- (1) 40 CFR 63.7680
- (2) 40 CFR 63.7681
- (3) 40 CFR 63.7682
- (4) 40 CFR 63.7683(a)
- (5) 40 CFR 63.7683(b)
- (6) 40 CFR 63.7683(f)
- (7) 40 CFR 63.7690(a)(1)(i)
- (8) 40 CFR 63.7690(a)(5)(i)
- (9) 40 CFR 63.7690(a)(7)
- (10) 40 CFR 63.7700(a)
- (11) 40 CFR 63.7700(b)
- (12) 40 CFR 63.7710(a)
- (13) 40 CFR 63.7710(b)(1)
- (14) 40 CFR 63.7710(b)(3)
- (15) 40 CFR 63.7710(b)(4)
- (16) 40 CFR 63.7710(b)(5)
- (17) 40 CFR 63.7710(b)(6)
- (18) 40 CFR 63.7720
- (19) 40 CFR 63.7730(a)
- (20) 40 CFR 63.7730(b)
- (21) 40 CFR 63.7731
- (22) 40 CFR 63.7732(a)
- (23) 40 CFR 63.7732(b)(1)
- (24) 40 CFR 63.7732(b)(2)
- (25) 40 CFR 63.7732(b)(4)
- (26) 40 CFR 63.7732(c)(1)
- (27) 40 CFR 63.7732(c)(2)
- (28) 40 CFR 63.7732(c)(4)
- (29) 40 CFR 63.7732(d)
- (30) 40 CFR 63.7732(h)
- (31) 40 CFR 63.7733(a)
- (32) 40 CFR 63.7733(e)
- (33) 40 CFR 63.7733(f)
- (34) 40 CFR 63.7734(a)(1)(i)
- (35) 40 CFR 63.7734(a)(5)(i)

- (36) 40 CFR 63.7734(a)(7)
- (37) 40 CFR 63.7734(b)(1)
- (38) 40 CFR 63.7735(a)
- (39) 40 CFR 63.7736(c)
- (40) 40 CFR 63.7736(d)
- (41) 40 CFR 63.7740(b)
- (42) 40 CFR 63.7741(b)
- (43) 40 CFR 63.7742
- (44) 40 CFR 63.7743(a)(1)(i)
- (45) 40 CFR 63.7743(a)(5)(i)
- (46) 40 CFR 63.7743(a)(7)
- (47) 40 CFR 63.7743(a)(12)
- (48) 40 CFR 63.7743(c)
- (49) 40 CFR 63.7744(a)
- (50) 40 CFR 63.7745
- (51) 40 CFR 63.7746
- (52) 40 CFR 63.7750(a)
- (53) 40 CFR 63.7750(b)
- (54) 40 CFR 63.7750(d)
- (55) 40 CFR 63.7750(e)
- (56) 40 CFR 63.7751
- (57) 40 CFR 63.7752(a)
- (58) 40 CFR 63.7752(c)
- (59) 40 CFR 63.7753
- (60) 40 CFR 63.7760
- (61) 40 CFR 63.7761
- (62) 40 CFR 63.7765

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

- (c) The one (1) paint booth, identified as CO5, at this source is subject to the NESHAP, 40 CFR 63.3880 - 63.3981, Subpart MMMM, Surface Coating of Miscellaneous Metal Parts and Products, which is incorporated by reference as 326 IAC 20-80, because it is an existing affected source, as defined in 40 CFR 63.3882, that uses 946 liters (250 gallons (gal)) per year, or more, of coatings that contain hazardous air pollutants (HAP) in the surface coating of miscellaneous metal parts and products that is located at a major source of emissions of HAP. The emission units subject to this rule include the following:
- (1) One (1) paint booth, identified as CO5, constructed in 2005, used for machine part maintenance coating operations, with a maximum throughput rate of 120 metal units per hour, utilizing dry filters for particulate control, exhausting inside the building or through stack No. S-CO5.
  - (2) All storage containers and mixing vessels in which coatings, thinners and/or other additives, and cleaning materials are stored or mixed;
  - (3) All manual and automated equipment and containers used for conveying coatings, thinners and/or other additives, and cleaning materials; and
  - (4) All storage containers and all manual and automated equipment and containers used for conveying waste materials generated by a coating operation.

Under the Surface Coating of Miscellaneous Metal Parts and Products NESHAP (40 CFR 63, Subpart MMMM), the one (1) paint booth, identified as CO5, is considered an existing affected source.

The compliance date for the Surface Coating of Miscellaneous Metal Parts and Products NESHAP, 40 CFR 63, Subpart MMMM, is January 2, 2007.

INTAT Precision, Inc.  
Rushville, Indiana  
Permit Reviewer: TE/EVP

Page 23 of 153  
Source Modification No.: 139-22701-00011  
Permit Modification No.: 139-22744-00011

Nonapplicable portions of the NESHAP will not be included in the permit. The emission unit is subject to the following portions of Subpart Mmmm:

- (1) 40 CFR 63.3880
- (2) 40 CFR 63.3881(a)
- (3) 40 CFR 63.3881(b)
- (4) 40 CFR 63.3882(a)
- (5) 40 CFR 63.3882(b)
- (6) 40 CFR 63.3882(e)
- (7) 40 CFR 63.3883(b)
- (8) 40 CFR 63.3883(d)
- (9) 40 CFR 63.3890(b)(1)
- (10) 40 CFR 63.3891(a)
- (11) 40 CFR 63.3892(a)
- (12) 40 CFR 63.3893(a)
- (13) 40 CFR 63.3900(a)(1)
- (14) 40 CFR 63.3900(b)
- (15) 40 CFR 63.3901
- (16) 40 CFR 63.3910(a)
- (17) 40 CFR 63.3910(b)
- (18) 40 CFR 63.3910(c)(1) through (7)
- (19) 40 CFR 63.3910(c)(8)(i)
- (20) 40 CFR 63.3920(a)(1)
- (21) 40 CFR 63.3920(a)(2)
- (22) 40 CFR 63.3920(a)(3)(i) through (iv)
- (23) 40 CFR 63.3920(a)(4)
- (24) 40 CFR 63.3920(a)(5)
- (25) 40 CFR 63.3930(a)
- (26) 40 CFR 63.3930(b)
- (27) 40 CFR 63.3930(c)(1)
- (28) 40 CFR 63.3930(c)(2)
- (29) 40 CFR 63.3930(d)
- (30) 40 CFR 63.3930(e)
- (31) 40 CFR 63.3930(f)
- (32) 40 CFR 63.3930(j)
- (33) 40 CFR 63.3931
- (34) 40 CFR 63.3940
- (35) 40 CFR 63.3941
- (36) 40 CFR 63.3942
- (37) 40 CFR 63.3980
- (38) 40 CFR 63.3981

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

- (d) The two (2) 2,000 gallon resin storage tanks, are subject to the NESHAP, 40 CFR 63.2330 – 63.2406, Subpart EEEE, Organic Liquids Distribution (Non-Gasoline), which is incorporated by reference as 326 IAC 20-83, because the resin storage tanks at this source are organic liquids distribution (OLD) (non-gasoline) operations located at a major source of HAP emissions. The emission units subject to this rule include the following:

Two (2) fixed roof resin storage tanks, each with a maximum storage capacity of 2,000 gallons.

Under the Organic Liquids Distribution (Non-Gasoline) NESHAP (40 CFR 63, Subpart EEEE), the two (2) fixed roof resin storage tanks are considered an existing affected source. Since the storage tanks each have a storage capacity less than 5,000 gallons, there are no applicable emission limitations or control requirements for the tanks. The source has also stated that there are no loading racks at the source meeting the definition in the rule.

The compliance date for the Organic Liquids Distribution (Non-Gasoline) NESHAP, 40 CFR 63, Subpart EEEE, is February 5, 2007.

Nonapplicable portions of the NESHAP will not be included in the permit. The emission units are subject to the following portions of Subpart EEEE:

- (1) 40 CFR 63.2330
- (2) 40 CFR 63.2334(a)
- (3) 40 CFR 63.2338(a)
- (4) 40 CFR 63.2338(b)(1), (3)(i) and (iii)
- (5) 40 CFR 63.2338(f)
- (6) 40 CFR 63.2342(b)(1)
- (7) 40 CFR 63.2342(d)
- (8) 40 CFR 63.2343(a)
- (9) 40 CFR 63.2343(d)
- (10) 40 CFR 63.2382(a)
- (11) 40 CFR 63.2382(b)(1)
- (12) 40 CFR 63.2390(a)
- (13) 40 CFR 63.2394
- (14) 40 CFR 63.2398
- (15) 40 CFR 63.2402
- (16) 40 CFR 63.2406

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

- (e) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to new or modified emission units that involve a pollutant-specific emission unit and meet the following criteria:
  - (1) has a potential to emit before controls equal to or greater than the major source threshold for the pollutant involved;
  - (2) is subject to an emission limitation or standard for that pollutant; and
  - (3) uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.

The following table is used to identify the applicability of each of the criteria, under 40 CFR 64.1, to each new or modified emission unit involved:

| Emission Unit                | Control Device Used | Emission Limitation (Y/N) | Uncontrolled PTE (tons/year) | Controlled PTE (tons/year) | Major Source Threshold (tons/year) | CAM Applicable (Y/N) | Large Unit (Y/N) |
|------------------------------|---------------------|---------------------------|------------------------------|----------------------------|------------------------------------|----------------------|------------------|
| Pre-Blast (3055) PM (1997)   | BH #6030            | Y                         | 744.60                       | 5.63                       | 100                                | Y                    | N                |
| Pre-Blast (3055) PM10 (1997) | BH #6030            | Y                         | 74.46                        | 5.63                       | 100                                | N                    | N                |

| Emission Unit                  | Control Device Used | Emission Limitation (Y/N) | Uncontrolled PTE (tons/year) | Controlled PTE (tons/year) | Major Source Threshold (tons/year) | CAM Applicable (Y/N) | Large Unit (Y/N) |
|--------------------------------|---------------------|---------------------------|------------------------------|----------------------------|------------------------------------|----------------------|------------------|
| Final Blast (3090) PM (1997)   | BH #6030            | Y                         | 744.60                       | 7.88                       | 100                                | Y                    | N                |
| Final Blast (3090) PM10 (1997) | BH #6030            | Y                         | 74.46                        | 7.88                       | 100                                | N                    | N                |
| MeshBelt Blast PM (2001)       | Baghouse DC-13      | Y                         | 819.06                       | 5.41                       | 100                                | Y                    | N                |
| MeshBelt Blast PM10 (2001)     | Baghouse DC-13      | Y                         | 81.91                        | 5.41                       | 100                                | N                    | N                |

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are applicable to the Pre-Blast (3055), the Final Blast (3090), and the MeshBelt Blast (2001) operations for PM upon issuance of the Title V Renewal. A CAM plan must be submitted as part of the Renewal application.

|   |
|---|
| <b>State Rule Applicability Determination</b> |
|---|

The following state rules are applicable to the source due to the modification:

**326 IAC 2-2 (PSD)**

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

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

Pursuant to 326 IAC 2-4.1-1 (New Source Toxics Control), any new process or production unit, which in and of itself emits or has the potential to emit (PTE) 10 tons per year of any HAP or 25 tons per year of any combination of HAPs, must be controlled using technologies consistent with Maximum Achievable Control Technology (MACT).

The operation of the core production operations and the Plant 1 and Plant 2 foundry operations will emit greater than ten (10) tons per year for a single HAP and greater than twenty-five (25) tons per year for a combination of HAPs. However, pursuant to 326 IAC 2-4.1-1(b)(2), because the core production operations and the Plant 1 and Plant 2 foundry operations are specifically regulated by NESHAP 40 CFR 63, Subpart EEEEE, which was issued pursuant to Section 112(d) of the CAA, the core production operations and the Plant 1 and Plant 2 foundry operations are exempt from the requirements of 326 2-4.1. Additionally, the core production operations were constructed prior to the rule applicability date of July 27, 1997.

The existing manganese limits that were included in the Part 70 permit to limit HAP emissions from the Plant 2 foundry operations constructed in 1997 to less than major source levels will be removed in this modification since the Plant 2 foundry operations are subject to the NESHAP, 40 CFR 63, Subpart EEEEE.

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

Since this source is required to have an operating permit under 326 IAC 2-7, Part 70 Permit Program, this source is subject to 326 IAC 2-6 (Emission Reporting). In accordance with the compliance schedule in 326 IAC 2-6-3, an emission statement must be submitted triennially. The first report is due no later than July 1, 2005, and subsequent reports are due every three (3) years thereafter. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

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

- (a) Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the one (1) shotblast unit, identified as Wheelabrator MeshBelt Blast shall not exceed 20.44 pounds per hour when operating at a process weight rate of 11.0 tons per hour. The pound per hour limitation was calculated with the following equation:

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

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

The baghouse DC-13 shall be in operation at all times the one (1) shotblast unit, identified as Wheelabrator MeshBelt Blast is in operation, in order to comply with this limit.

- (b) Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from each of the shot blast units identified as Pre-Blast ID #3055 and Final Blast ID #3090 shall not exceed 19.18 pounds per hour when each is operating at a process weight rate of 10.0 tons per hour. The pound per hour limitation was calculated with the following equation:

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

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

The baghouse BH #6030 shall be in operation at all times the two (2) shot blast units identified as Pre-Blast ID #3055 and Final Blast ID #3090 are in operation, in order to comply with this limit.

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

This rule applies to facilities located anywhere in the state that were constructed on or after January 1, 1980, which have potential volatile organic compounds (VOC) emissions of 25 tons per year or more, and which are not otherwise regulated by other provisions of 326 IAC 8, and requires the reduction of VOC emissions using Best Available Control Technology (BACT).

INTAT has requested approval to revise the VOC limits for the pouring, cooling and shakeout processes on Plant 1, Line 2 (P13B, P14B, and P16B). Condition D.3.4 of the current permit establishes a VOC limit of 0.8 pounds of VOC per ton of metal from pouring, cooling, shakeout and bad heat shakeout combined to limit VOC emissions to less than 25 tons per year to render 326 IAC 8-1-6 not applicable. However, testing was conducted in September, 2005 and the tested emission rate was higher than the VOC limit. Since the source can not comply with a VOC limit of less than 25 tons per year, 326 IAC 8-1-6 applies and a BACT determination is required. INTAT submitted a BACT analysis for these operations. A detailed BACT analysis is presented in Appendix B. IDEM, OAQ has determined that the following has been determined to be BACT for the Pouring (P13B), Cooling (P14B), Shakeout (P16B) and bad heat shakeout processes:

- (a) The use of Material Substitution and Lower-Emitting Processes/Practices to limit VOC emissions;
- (b) The installation of an of Advanced Oxidation (AO) system with a minimum VOC reduction efficiency of 20%;
- (c) A VOC emission limit of 1.2 pounds per ton of metal throughput to the pouring, cooling and shakeout operations (P13B, P14B, and P16B) and bad heat shakeout operations combined; and
- (d) The throughput of metal to the pouring, cooling and shakeout operations (P13B, P14B, and P16B) and bad heat shakeout operations combined shall not exceed 79,000 tons per twelve (12)

consecutive month period, with compliance determined at the end of each month.

The AO system shall be installed according to the following schedule:

- Day 1: Permit issuance.
- 30 days after permit issuance: INTAT will issue a purchase order for the AO system.
- 130 days after permit issuance: Site delivery of AO system equipment.
- 160 days after permit issuance: 90% of the installation will be complete. Remaining installation must be completed during Plant Shutdown.
- July, 2008 Plant Shutdown: AO system will be connected to INTAT's sand cooling and dust collection systems.
- 14 Days after Plant Shutdown: Begin Cleanwater Phase (Normal tap water run through system to verify system integrity and no process issues).
- 35 Days after Plant Shutdown: Begin Clearwater Phase (Hydrogen peroxide slowly introduced to system, slow incremental changes made to sand system to accommodate peroxide effects).
- 73 Days after Plant Shutdown: Start Blackwater Phase (Dust slowly introduced to AO system, slow incremental changes made to sand system to accommodate effects).
- 101 Days after Plant Shutdown: Monitor system for stability issues, effects on part quality.
- 250 Days after Plant Shutdown: Stack testing will be completed.

There are no other new state rules applicable to the source as a result of this modification.

### **Compliance Determination and Monitoring Requirements**

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

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

The existing compliance determination requirements applicable to this source are as follows:

- (a) In order to demonstrate compliance with the limits in Condition D.2.1, the Permittee shall perform PM10 testing (for both filterable and condensable PM10) for the baghouse controlling the metal inoculation heaters (P11) exhausting to stack 3B utilizing methods as approved by the Commissioner.
- (b) In order to demonstrate compliance with the limits in Conditions D.2.3 and D.2.4, the Permittee shall perform PM and PM10 testing for the cartridge collectors controlling the melting system (P8) and the inoculation operation (P11) exhausting to stacks 3A and 3B utilizing methods as approved by the Commissioner.

These tests shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration. PM10 includes filterable and condensable PM10. Testing shall be conducted in accordance with Section C - Performance Testing.

- (c) In order to demonstrate compliance with the limits in Conditions D.3.1, D.3.2, D.3.3, D.3.4 and D.3.5, the Permittee shall perform PM and PM10 testing (for both filterable and condensable PM10) for the following facilities utilizing methods as approved by the Commissioner.
  - (1) baghouse BH-6400 controlling the sand handling system exhausting to stack 6400.
  - (2) the baghouse, DC3B, controlling the pouring operation (P13B) exhausting to stack 3B.
  - (3) the baghouse BH-6200 controlling the cooling operation (P14B), the shakeout process (P16B), and the casting conveyors exhausting to stack 6200.
  - (4) the cartridge collector DC-8B controlling the shotblast system.
- (d) Within 250 days after the July, 2008 plant shutdown, in order to demonstrate compliance with Conditions D.3.6, D.3.7, and D.3.8, the Permittee shall perform VOC and CO testing for the pouring station (P13B), cooling line (P14B), and shakeout (P16B) operations exhausting to stacks 3B and 6200 utilizing methods as approved by the Commissioner.
- (e) The tests required in (c) and (d) above shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.
- (f) In order to demonstrate compliance with the limits in Conditions D.4.2 and D.4.3, the Permittee shall perform PM and PM-10 testing for the following facilities utilizing methods as approved by the Commissioner:
  - (1) the baghouse controlling the melting, pouring and inoculation operations (1110, 2000, and 1150) exhausting to stack 6010;
  - (2) the baghouses controlling the mold/casting cooling system (2015 and 2020) exhausting to stacks 6020, 6030A and 6030B;
  - (3) the baghouse controlling the shakeout operation (3010) exhausting to stacks 6030A and 6030B;
  - (4) the baghouses controlling the sand and waste sand handling system (4000, 4140, and 5000) exhausting to stacks 6020 and 6040 (PM and PM10 testing only); and
  - (5) the one dust collector controlling two (2) grinders, exhausting to room.

These tests shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration. PM-10 includes filterable and condensable PM-10. Testing shall be conducted in accordance with Section C - Performance Testing.

- (g) In order to demonstrate compliance with Condition D.4.4, the Permittee shall perform VOC testing for the pouring operation (2000), the casting cooling/conveyor system (2015 and 2020), and the casting shakeout system (3010) utilizing methods as approved by the Commissioner. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

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

- (a) The one (1) shotblast unit, identified as Wheelabrator MeshBelt Blast, has applicable compliance monitoring conditions as specified below:
- (1) Visible emission notations of the Wheelabrator MeshBelt Blast baghouse DC-13 stack exhaust shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
  - (2) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
  - (3) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
  - (4) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
  - (5) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.
  - (6) The Permittee shall record the pressure drop across the baghouse used in conjunction with the Wheelabrator MeshBelt Blast, at least once per day when the process is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 0.5 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.  
  
The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.
  - (7) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

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

These monitoring conditions are necessary because the baghouse for the Wheelabrator MeshBelt Blast must operate properly to ensure compliance with 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) and 326 IAC 2-7 (Part 70)) and to render the requirements of 326 IAC 2-2 (PSD) not applicable.

- (b) The two (2) shot blast units identified as Pre-Blast ID #3055 and Final Blast ID #3090 have applicable compliance monitoring conditions as specified below:
- (1) Visible emission notations of the stack exhaust of the baghouse BH #6030 controlling emissions from the Pre-Blast ID #3055 and Final Blast ID #3090 shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
  - (2) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
  - (3) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
  - (4) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
  - (5) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.
  - (6) The Permittee shall record the pressure drop across the baghouse used in conjunction with the Pre-Blast ID #3055 and Final Blast ID #3090, at least once per day when the process is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 0.5 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM,

OAQ, and shall be calibrated at least once every six (6) months.

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

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

These monitoring conditions are necessary because the baghouse for the Pre-Blast ID #3055 and Final Blast ID #3090 must operate properly to ensure compliance with 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) and 326 IAC 2-7 (Part 70)) and to render the requirements of 326 IAC 2-2 (PSD) not applicable.

- (c) The AO system or equivalent system has applicable compliance monitoring conditions as specified below:
  - (1) Upon commencing initial operation of the AO system or equivalent system, the Permittee shall monitor and record the ultra-sonic power of the AO system or equivalent system used in conjunction with the pouring station (P13B), cooling line (P14B), shakeout (P16B) and bad heat shakeout processes, at least once per day when the pouring station (P13B), cooling line (P14B), shakeout (P16B) and bad heat shakeout processes are in operation. When for any one reading, the ultra-sonic power is less than 1100 W or a minimum established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. An ultra-sonic power reading that is below the above mentioned minimum is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.
  - (2) Upon commencing initial operation of the AO system or equivalent system, the Permittee shall monitor and record the ozone generator plasma voltage of the AO system or equivalent system used in conjunction with the pouring station (P13B), cooling line (P14B), shakeout (P16B) and bad heat shakeout processes, at least once per day when the pouring station (P13B), cooling line (P14B), shakeout (P16B) and bad heat shakeout processes are in operation. When for any one reading, the ozone generator plasma voltage is less than 2400 V or a minimum established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. An ozone generator plasma voltage reading that is below the above mentioned minimum is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

- (3) Upon commencing initial operation of the AO system or equivalent system, the Permittee shall monitor and record the hydrogen peroxide usage of the AO system or equivalent system used in conjunction with the pouring station (P13B), cooling line (P14B), shakeout (P16B) and bad heat shakeout processes, at least once per day when the pouring station (P13B), cooling line (P14B), shakeout (P16B) and bad heat shakeout processes are in operation. When for any one reading, the hydrogen peroxide is less than 1 gallon per hour of muller operation, or a minimum established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A peroxide usage reading that is below the above mentioned minimum is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

The instruments used for determining the ultra-sonic power, the ozone generator plasma voltage and the hydrogen peroxide usage shall comply with Section C - Instrument specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

These monitoring conditions are necessary because the AO system or equivalent system for the pouring station (P13B), cooling line (P14B), shakeout (P16B) and bad heat shakeout processes must operate properly to ensure compliance with 326 IAC 2-2 (PSD), 326 IAC 8-1-6 (BACT) and 326 IAC 2-7 (Part 70)).

#### Proposed Changes

The changes listed below have been made to Part 70 Operating Permit No. T139-7531-00011. Deleted language appears as ~~strike throughs~~ and new language appears in **bold**:

1. Section A.1 is revised to correct the source description to also refer to ductile iron. Additionally, the identification of the responsible official has been removed from section A.1.

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

The Permittee owns and operates a stationary gray **and ductile** iron foundry.

|                              |  |
|------------------------------|--|
| Responsible Official:        | <del>_____</del> <b>President</b>  |
| Source Address:              | 2148 State Road 3 North, Rushville, Indiana 46173  |
| Mailing Address:             | P.O. Box 488, Rushville, Indiana 46173   |
| General Source Phone Number: | 317-932-5323   |
| SIC Code:                    | 3321   |
| County Location:             | Rush   |
| Source Location Status:      | Attainment for all criteria pollutants   |
| Source Status:               | Part 70 <b>Operating</b> Permit Program<br>Major Source, under PSD <b>Rules</b><br>Major Source, Section 112 of the Clean Air Act<br>1 of 28 Source Categories |

2. Section A.2 is revised to incorporate the unpermitted equipment and to revise the facility descriptions as requested by INTAT Precision, Inc. as follows:

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

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

- (a) Core production facilities consisting of:

- (1) Three (3) core sand bins and four (4) isocure cold box core machines, identified as P4, P5, P6 and P7, with P4, P5, and P6 constructed in 1988 and P7 constructed in 1994, each with a maximum capacity of processing 0.5 ton of core sand per hour, 8.0 pounds of resin per ton of core sand per hour and 1.12 pounds of TEA DMIPA catalyst per ton of core sand, utilizing a cartridge collector for particulate control **of the core sand bins**, exhausting to stack ID No. 9. ~~and (1) scrubber (ID Scrubber #1) for control of triethylamine (TEA) emissions from core machines P4 and P5, exhausting through stack ID No. 10A and (1) one scrubber (ID Scrubber #2) for control of TEA emissions from core machines P6 and P7, exhausting through stack ID No. 10B.~~

~~The source voluntarily utilizes two (2) TEA scrubbers.~~

- (b) ~~Two (2)~~ **One (1)** gray and ductile iron foundry lines, constructed in 1988, **identified as Plant 1**, consisting of the following:

- (1) ~~Plant 1~~ **Melting and Finishing** Operations originally constructed in 1988 and ~~to be~~ modified in 2004, consisting of:

- (A) One (1) indoor charge handling system for the three (3) electric induction furnaces, with a total maximum throughput capacity of 20 tons of metal per hour, consisting of three (3) units, identified as P1, P2, and P3, each with a maximum throughput capacity of 10 tons of metal per hour;

Note: The power control system at the plant limits the total maximum throughput of the charge handling system to 20 tons of metal per hour.

- (B) One (1) melting system, identified as P8, with a maximum capacity of 20 tons of metal per hour, consisting of three (3) electric induction furnaces, each with a melting capacity of 10 tons per hour, utilizing two (2) cartridge collectors for particulate control, **identified as DC-3A and DC-3B**, exhausting to **a common** stack ID Nos. ~~3A and 3B~~;

Note: The maximum throughput of metal for the melting system is limited to 20 tons per hour by the maximum throughput from the charge handling system of 20 tons of metal per hour.

- (C) One (1) holding system consisting of the following equipment:

- (1) Two (2) electric holding furnaces, identified as P9, each with a holding capacity of 50 tons and a total maximum throughput capacity of 100 tons of metal per hour; ~~utilizing two (2) cartridge collectors for particulate control, exhausting to stack ID Nos. 3A and 3B;~~

- (2) ~~Six (6) ladle heaters to be replaced in 2004, identified as P10, each with a heating capacity of 2.3 million British thermal units (MMBtu) per hour, each combusting natural gas, exhausting to stacks 12A, 12B and 12C.~~ **Two (2) natural gas-fired metal treatment ladle heaters constructed in 2004, each with a rated capacity of 1.0 MMBtu/hr.**

- (3) **Two (2) natural gas-fired pouring ladle heaters (P10) constructed in 2004, each with a rated capacity of 0.4 MMBtu/hr.**

- (D) One (1) inoculation system consisting of two (2) metal treatment ladles ~~to be~~ replaced in 2004 identified as P11, each with a maximum throughput capacity of 10 tons of metal per hour, controlled by Dust Collectors DC-3A and DC-3B for particulate control, exhausting to a common stack 3B.
- (E) **Grinding processes identified as P29 and P30, constructed in 1988, with a total capacity of 12 tons of metal per hour, controlled by dust collector DC-8A, exhausting to stack 8A.**
- ~~(c)~~ Plant 1 Casting Line 1 constructed in 1988 with a capacity of 10 tons of metal and 75 tons of sand per hour, whose total capacity is further restricted by the overall melt capacity of 20 tons of metal/hour for both Lines 1 and 2, consisting of the following equipment:
- ~~(1)~~ One (1) sand system consisting of units identified as P32A, P33A, P34A, P35A, P36A, P37A, and P39A, controlled by baghouses DC2 and DC3A, exhausting to stacks 2 and 3A.
- ~~(2)~~ One (1) pouring station, identified as P13A controlled by dust collector DC2, exhausting to stack 2.
- ~~(3)~~ One (1) cooling line identified as P14A, controlled by dust collector DC1B, exhausting to stack 1A.
- ~~(4)~~ One (1) shakeout unit identified as P16A, controlled by dust collectors DC1B and DC2, exhausting to stacks 1B and 2.
- ~~(5)~~ Casting conveyors identified as P17A, P18A, P19A, P20A, P21A, P22A controlled by baghouse DC-6A exhausting through stack 6A.
- ~~(6)~~ Shot blast processes consisting of two shot blast units identified as P26, and P27 with a total capacity of 12 tons of metal/hour, controlled by dust collector DC-8A, exhausting to stack 8A.
- ~~(7)~~ Grinding processes identified as P29 and P30, with a total capacity of 12 tons of metal/hour, controlled by dust collector DC-8A, exhausting to stack 8A.
- ~~(d)~~(2) Plant 1, Casting Line 2, ~~to be~~ constructed in 2004, with a capacity of 15 tons of metal per hour and 70 tons of sand per hour consisting of the following equipment:
- ~~(1)~~(A) One (1) sand system **with a maximum capacity of 70 tons of sand per hour**, consisting of units identified as P32B, P33B, P34B, P35B, P36B, P37B and P39B, controlled by baghouses, BH4-6300 and BH4-6400, and exhausting to stack 4-6300/6400 (4-6300/6400 is a single stack).
- ~~(2)~~(B) One (1) pouring station identified as P13B **with a maximum capacity of 15 tons of metal poured per hour**, controlled by dust collector DC3B, exhausting to stack 3B.
- ~~(3)~~(C) One (1) cooling line identified as P14B, **with a maximum capacity of 15 tons of metal per hour**, controlled by baghouse BH4-6200, exhausting to stack 4-6200.
- ~~(4)~~(D) One (1) shakeout unit identified as P16B, **with a maximum capacity of 15 tons of metal per hour**, controlled by baghouse BH4-6200, exhausting to stack 4-6200.

- ~~(5)~~(E) One (1) bad heat shakeout unit controlled by dust collector DC-5, exhausting to stack 5.
- ~~(6)~~(F) Casting conveyors **and desprue operations**, identified as P17B, P18B, P19B, P20B, P21B, and P22B, **with a maximum capacity of 15 tons of metal per hour**, controlled by baghouses DC-7, and DC-8B, exhausting inside the building, and baghouse ~~DC-6B~~ **BH6200** exhausting to stack ~~6B~~ **ID #6200**.
- ~~(7)~~(G) One (1) Plant 1, Line 2 shot blast process consisting of three shot blast units identified as P40, P41 and P42 each with a maximum capacity of 5.3 tons of metal per hour and with a combined maximum capacity for all three of ~~11.3~~ **9.0** tons of metal per hour, controlled by dust collector DC-8B, exhausting inside the building.
- (3) **One (1) shotblast unit, identified as Wheelabrator MeshBelt Blast, constructed in 2001, with a maximum capacity of 11.0 tons of metal per hour, with particulate matter emissions controlled by a baghouse DC-13 and exhausting internally.**
- ~~(e)~~(c) Plant 2, ~~gray ductile~~ iron foundry line, constructed in 1997, consisting of the following:
- (1) One (1) indoor charge handling system, identified as ID #1000A, with a maximum capacity of 10 tons of metal per hour;
  - (2) One (1) melting, ~~and~~ **inoculation and** pouring system, identified as ID #~~4000~~ **1110, 1150 and 2000, respectively**, with a maximum capacity of 10 tons of metal per hour, utilizing a baghouse (ID # ~~BH6400~~ **6010**) for particulate control, exhausting to stack ID #~~6400~~ **6010**, consisting of the following equipment:
    - (A) Two (2) electric induction furnaces, each with a maximum capacity of 10 tons of metal per hour;
    - (B) One (1) electric holding furnace (**uncontrolled**);
    - (C) Two (2) natural gas-fired ladle heaters, identified as ID #6600 and 6610, each with a maximum heat input rate of 2 MMBtu per hour;
- Note: The maximum throughput of metal for the melting and pouring system is limited to 10 tons of metal per hour by the maximum throughput from the charge handling system of 10 tons of metal per hour and the power control systems at the plant.
- (3) One (1) ~~mold/casting cooling system~~ **machine**, identified as ID #~~2000~~ **2010**, with a maximum capacity of 10 tons of metal per hour and 70 tons of sand per hour, utilizing one (1) baghouse (ID # ~~BH6200~~ **6010**) for particulate control, exhausting to stack ID#s ~~6200A and 6200B~~ **6010**;
  - (4) **One (1) casting cooling and conveyor system, identified as #2015 and 2020, respectively, with a maximum capacity of 10 tons of metal per hour and 70 tons of sand per hour, utilizing two (2) baghouses (ID # BH6020 and 6030) for particulate control exhausting to stack ID#s 6020 and 6030A and 6030B;**
  - ~~(4)~~(5) One (1) casting shakeout system, identified as ID #~~3000~~ **3010**, with a maximum capacity of 10 tons of metal per hour and 70 tons of sand per hour, utilizing one (1) baghouse (ID #~~BH6200~~ **6030**) for particulate control, exhausting to stack ID#s ~~6200A and 6200B~~ **6030A and 6030B**;

- (~~5~~)(6) One (1) sand and waste sand handling system, identified as ID #4000, **#4140, and 5000**, with a maximum capacity of 70 tons of sand per hour, utilizing two (2) baghouses (~~BH6300 and BH6400~~ **6020 and 6040**) for particulate control, exhausting to stack ID #s ~~6300 and 6400~~ **6020 and 6040**;
- (7) **Two (2) shot blast units, identified as Pre-Blast ID #3055 and Final Blast ID #3090, each with a maximum capacity of 10 tons of metal per hour, utilizing one (1) baghouse (BH #6030) for particulate control, exhausting to stack ID # 6030A and 6030B;**
- (~~6~~)(8) One (1) finishing operation, identified as ID #8000, with a maximum capacity of 5.5 tons of metal per hour, consisting of trim presses, uncontrolled.

3. Section A.3 is revised to include the additional insignificant activities and to revise the description for the paint booth as permitted under Administrative Amendment No. 139-19865-00011, issued on March 4, 2005 as follows:

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

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

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units (Btu) per hour;
    - (1) Two (2) boilers, identified as P40 and P41, with a maximum heat capacity of 0.9 and 1.2 million British units per hour, respectively, each combusting natural gas;
    - (2) **One (1) natural gas-fired heater to dry scrap metal in Plant 1 rated at 1.0 MMBtu per hour.**
- \*\*\*
- (i) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors, and electrostatic precipitators with design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations; including the following specifically regulated grinders:
    - (1) Six (6) bench grinders, identified as ID #8000, with a maximum capacity of 5.5 tons or metal per hour, utilizing fabric filters (FFA, FFB, FFC, FFD, and FFE) for control; four (4) grinders each controlled by one fabric filter, and two (2) grinders controlled by one (1) fabric filter, **all exhausting inside the building.** [326 IAC 6-3-2]
- \*\*\*
- (k) Other activities or categories not previously identified:
    - (1) Six (6) scrap bays, identified as P47 through P52, each with PM emissions of approximately 0.16 pound per hour; [326 IAC 6-3-2]
    - (2) Two (2) sand towers, identified as P55 and P56, for the gray **and ductile** iron foundry line constructed in 1988 (emissions are included in sand handling calculations);
    - (3) Maintenance shop operations, identified as P58 and P59, each with PM emissions of approximately 0.1 pounds per hour; [326 IAC 6-3-2]
    - (4) Two (2) collector penthouses, identified as P53 and P54, each with PM emissions of approximately 0.16 pounds per hour; [326 IAC 6-3-2]

- (5) One (1) material separator (cartridge filter fallout collection) with PM emissions approximately 0.6 pounds per hour; [326 IAC 6-3-2]
  - (6) One (1) paint booth, identified as ~~ID # 6604~~ **CO5**, used for machine part maintenance coating operations, with a maximum throughput rate of ~~90~~ **120** metal units per hour, utilizing dry filters for particulate control, exhausting to ~~stacks ID # SNP-1 and SNP-2~~. Potential VOC emissions are approximately 0.08 pounds per hour **inside the building or through stack No. SCO5**; [326 IAC 6-3-2]
  - (7) One (1) scrap yard;
  - (8) **Two (2) fixed roof resin storage tanks, each with a maximum storage capacity of 2,000 gallons [40 CFR 63, Subpart EEEE].**
- (l) ~~Three (3)~~ **One (1)** sand towers for the ~~gray~~ **ductile** iron foundry line constructed in 1997, which house the sand silos, bond silos, sand mullers, and sand conveyors used with the sand handling operations; and

\*\*\*

4. Upon further review, IDEM has decided to include updates to further address and clarify the permit term and the term of the conditions. This includes the addition of the condition: Term of Conditions [326 IAC 2-1.1-9.5] and changes to the following conditions: Permit Term, Prior Permits Superseded, Termination of Right to Operate, and Permit Renewal.

**B.2 Permit Term [326 IAC 2-7-5(2)][326 IAC 2-1.1-9.5][326 IAC 2-7-4(a)(1)(D)][IC 13-15-3-6(a)]**

---

- (a) This permit, **T139-7531-00011**, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date **of this permit**.
- (b) **If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.**

**B.3 Term of Conditions [326 IAC 2-1.1-9.5]**

---

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

- (a) **the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or**
- (b) **the emission unit to which the condition pertains permanently ceases operation.**

**B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5][326 IAC 2-7-10.5]**

---

- (a) All terms and conditions of ~~previous~~ **established prior to T139-7531-00011** and issued pursuant to permitting programs approved into the state implementation plan have been either:
  - (1) incorporated as originally stated,
  - (2) revised **under 326 IAC 2-7-10.5**, or

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

~~by this permit.~~

- (b) **Provided that all terms and conditions are accurately reflected in this permit, all** previous registrations and permits are superseded by this **Part 70 operating** permit.

**B.414 Termination of Right to Operate** [326 IAC 2-7-10] [326 IAC 2-7-4(a)]

---

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

**B.4617 Permit Renewal** [326 IAC 2-7-4]

---

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

Request for renewal shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
**MC 61-53 IGCN 1003**  
Indianapolis, Indiana ~~46206-6015~~ **46204-2251**

- (b) ~~Timely Submittal of Permit Renewal~~ [326 IAC 2-7-4(a)(1)(D)]

~~(1)~~—A timely renewal application is one that is:

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

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

~~(2)~~—If IDEM, OAQ, 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, OAQ, takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ, any additional information identified as being needed to process the application.

~~(d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(c)]  
If IDEM, OAQ, 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.~~

5. In IDEM's Nonrule Policy Document, a table is given as an example for how sources can submit annual compliance certifications. B.9 Annual Compliance Certification is being revised to remove "in letter form" so that it does not contradict the guidance.

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

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

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
**MC 61-53 IGCN 1003**  
Indianapolis, Indiana ~~46206-6015~~ **46204-2251**

and

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

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

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

6. The phone number and the fax number listed in B.11, Emergency Provisions has been changed so that the OAQ's receptionist number is listed and the fax number for the compliance branch is

listed.

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

\*\*\*

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

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or  
Telephone Number: 317-233-~~567~~**40178** (ask for Compliance Section)  
Facsimile Number: 317-233-~~596~~**76865**

7. The word "in" will be removed from the second sentence of condition B.12, Permit Shield, to be consistent with 326 IAC 2-7-15(a).

B.12 Permit Shield [326 IAC 2-7-15][326 IAC 2-7-20][326 IAC 2-7-12]

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

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

\*\*\*

8. B.20, now re-numbered B.21, has been updated to include a new (b) concerning modifications to a major source. This is a change due to the NSR reform; IDEM wants sources to certify in their ACC if they make changes without notice.

B.2021 Source Modification Requirement [326 IAC 2-7-10.5]

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

9. For clarity, additional rule cites have been added to B.21 Inspection and Entry, now re-numbered B.22.

B.2422 Inspection and Entry [326 IAC 2-7-6][IC 13-14-2-2][IC 13-30-3-1][**IC 13-17-3-2**]

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

\*\*\*

10. Condition C.4 has been revised to remove the statement that 326 IAC 9-1-2 is not federally enforceable. 326 IAC 9-1 is now SIP approved and is therefore 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. ~~326 IAC 9-1-2 is not federally enforceable.~~

11. Condition C.18, paragraph (c) has been revised for clarity.

C.18 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-2][**326 IAC 2-3**]

---

\*\*\*

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

12. The Section C reporting requirements have been revised to include new requirements for major NSR sources.

C.19 General Reporting Requirements [326 IAC 2-7-5(3)(c)] [326 IAC 2-1.1-11] [**326 IAC 2-2**][**326 IAC 2-3**]

---

\*\*\*

- (e) **The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.** Reporting periods are based on calendar years, **unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.**
- (f) **If the Permittee is required to comply with the recordkeeping provisions of (c) in Section C - General Record Keeping Requirements for any "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(II) at an existing emissions unit, and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ :**
- (1) **The annual emissions, in tons per year, from the project identified in (c)(1) in Section C - General Record Keeping Requirements exceed the baseline actual emissions, as documented and maintained under Section C - General Record Keeping Requirements (c)(1)(C)(i), by a significant amount, as defined in 326 IAC 2-2-1(xx) and/or 326 IAC 2-3-1(qq), for that regulated NSR pollutant, and**
  - (2) **The emissions differ from the preconstruction projection as documented and maintained under Section C - General Record Keeping Requirements (c)(1)(C)(ii).**

**The report for project at an existing emissions unit shall be submitted within sixty (60) days after the end of the year and contain the following:**

- (1) **The name, address, and telephone number of the major stationary source.**
- (2) **The annual emissions calculated in accordance with (c)(2) and (3) in Section C - General Record Keeping Requirements.**

- (3) The emissions calculated under the actual-to-projected actual test stated in 326 IAC 2-2-2(d)(3) and/or 326 IAC 2-3-2(c)(3).
- (4) Any other information that the Permittee deems fit to include in this report,

Reports required in this part shall be submitted to:

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

- (g) The Permittee shall make the information required to be documented and maintained in accordance with (c) in Section C - General Record Keeping Requirements available for review upon a request for inspection by IDEM, OAQ. The general public may request this information from the IDEM, OAQ under 326 IAC 17.1.
13. Condition D.1 is revised to remove the VOC limit in condition D.1.3 to render the requirements of 326 IAC 8-1-6 (BACT) and 326 IAC 2-2 (PSD) not applicable since based on the maximum resin and DMIPA catalyst usage rates, unrestricted VOC emissions from core machines P4, P5, and P6 combined are less than 25 tons per year. Condition D.1.1 is revised to correct the process weight rate and particulate emission limit pursuant to 326 IAC 6-3-2 based on a maximum sand throughput to the core sand handling operation of 0.5 tons per hour. Also, Condition D.1.7, now re-numbered D.1.6, is revised to correct the pressure drop range.

## SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

### Emissions Unit Description:

- (a) Core production facilities consisting of:
  - (1) Three (3) core sand bins and four (4) isocure cold box core machines, identified as P4, P5, P6 and P7, with P4, P5, and P6 constructed in 1988 and P7 constructed in 1994, each with a maximum capacity of processing 0.5 ton of core sand per hour, 8.0 pounds of resin per ton of core sand per hour and 1.12 pounds of TEA DMIPA catalyst per ton of core sand, utilizing a cartridge collector for particulate control **of the core sand bins**, exhausting to stack ID No. 9. and (1) scrubber (ID Scrubber #1) for control of triethylamine (TEA) emissions from core machines P4 and P5, exhausting through stack ID No.10A and (1) one scrubber (ID Scrubber #2) for control of TEA emissions from core machines P6 and P7, exhausting through stack ID No.10B.

~~The source voluntarily utilizes two (2) TEA scrubbers.~~

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

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

#### D.1.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the ~~coremaking operation~~ **core sand handling in the core sand bins** shall not exceed ~~6.52~~ **2.58** pounds per hour when operating at a process weight rate of ~~4,000~~ **1,000** pounds of sand per hour.

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

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

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

#### D.1.2 PSD Minor Limit [326 IAC 2-2]

---

Total PM and PM10 emissions from the ~~coremaking operation~~ **core sand handling in the core sand bins** shall each not exceed ~~0.41 pound per ton of core sand throughput or~~ 0.82 pound per hour.

**Compliance with** ~~This~~ this emission limit, in addition to the emission limits listed in conditions ~~D.2.1 and D.2.2~~, **yield limits** PM and PM10 emissions from the ~~two (2) gray iron foundry lines~~ **Plant 1 Melting Operations and the core machines** constructed in 1988, ~~that are each to~~ less than 100 tons per year. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable.

#### ~~D.1.3 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]~~ [326 IAC 2-2]

---

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

~~(a) The total resin usage for core machines P4, P5, and P6, all constructed in 1988, shall not exceed 263,150 pounds of resin per 12 consecutive month period. The total amine gas catalyst usage for core machines P4, P5, and P6 shall not exceed 36,841 pounds of amine gas catalyst per 12 consecutive month period.~~

~~(b) The VOC emissions (not including amine gas catalyst emissions) from each of the Isocure cold box core machines P4, P5, and P6 shall not exceed 0.05 pound per pound of resin.~~

~~This will limit the total VOC emissions from core machines P4, P5, and P6 to less than 25 tons per year before controls. Therefore, the three (3) isocure cold box core machines are not subject to the requirements of 326 IAC 8-1-6 (New Facilities; General Reduction Requirements). Compliance with these limits is also necessary to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.~~

~~(c) Any change or modification which increases emissions of VOC from core machine P7 to greater than 25 tons per year must be approved by the Office of Air Quality before such change can occur.~~

~~The VOC emission limits and usage limits shall also render the requirements of 326 IAC 2-2 (PSD) not applicable.~~

#### D.1.43 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

---

A Preventive Maintenance Plan, in accordance with Section B – Preventive Maintenance Plan, of this permit, is required for these facilities and the cartridge collector for particulate control.

### Compliance Determination Requirements

#### D.1.54 Particulate Control [326 IAC 2-7-6(6)]

---

(a) In order to comply with conditions D.1.1 and D.1.2, the cartridge collector for particulate control shall be in operation and control emissions from the ~~coremaking process~~ **core sand handling in the core sand bins** at all times that the ~~coremaking process~~ **core sand handling in the core sand bins** is in operation.

(b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units

will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

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

#### **D.1.65 Visible Emissions Notations**

---

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

#### **D.1.76 Parametric Monitoring**

---

The Permittee shall record the pressure drop across the cartridge collector used in conjunction with the ~~coremaking operation~~ **core sand handling in the core sand bins**, at least once per day when the ~~coremaking process~~ **core sand handling in the core sand bins** is in operation ~~when venting to the atmosphere~~. When for any one reading, the pressure drop across the cartridge collector is outside the normal range of ~~4-0~~ **0.5** and ~~6-0~~ **8.0** inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C – Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C – Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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

#### **D.1.87 Broken or Failed Baghouse and Cartridge Collector Detection**

---

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

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

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

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

### D.1.98 Record Keeping Requirements

- ~~(a) To document compliance with Condition D.1.3 (a), the Permittee shall maintain records of the total amine gas catalyst and resin usages for the Isocure cold box core machines P4, P5, and P6 each month. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.~~
- ~~(b) To document compliance with Condition D.1.3 (b) and (c), the Permittee shall maintain records of the type of binders used for all of the Isocure cold box core machines each month in order to demonstrate that the type of binder used has not changed. INTAT Precision, Inc. is permitted to use the following binders: Isocure Part I polymeric resin and Isocure Part II polymeric MDI type diisocyanate.~~
- ~~(e)(a)~~ (a) To document compliance with Condition D.1.65, the Permittee shall maintain **daily** records of visible emission notations of the ~~ceremaking~~ **core sand handling** operation cartridge collector stack exhaust. **The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).**
- ~~(d)(b)~~ (b) To document compliance with Condition D.1.76, the Permittee shall maintain once per day records of the pressure drop during normal operation when venting to the atmosphere. **The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).**
- ~~(e)(c)~~ (c) All records shall be maintained in accordance with Section C – General Record Keeping Requirements, of this permit.

### D.1.10 Reporting Requirements

~~A quarterly summary of the information to document compliance with Condition D.1.3(a) shall be submitted to the address listed in Section C – General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).~~

14. Section D.2 is revised to include the changes pursuant to the Stay Agreement and other changes requested by INTAT Precision, Inc. in this modification described previously. Also, section D.2 has been combined with section D.3 since there are common control devices shared by emission units in both sections. Note that since the pouring, cooling and shakeout operations P13A, P14A, and P16A are no longer present at the source the VOC emission limit to render the requirements of 326 IAC 8-1-6 not applicable to these operations is no longer applicable. Since the unrestricted potential VOC emissions from the inoculation operation (P11) are less than 25 tons per year, 326 IAC 8-1-6 does not apply so the VOC emission limit for that operation has been removed also. Section D.2 is revised and section D.3 is removed as follows:

**SECTION D.2**

**FACILITY OPERATION CONDITIONS**

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

- (b) One (1) gray **and ductile** iron foundry line, constructed in 1988, **identified as Plant 1**, consisting of the following:
- (1) ~~Plant 1~~ **Melting and Finishing** Operations originally constructed in 1988 and ~~to be~~ modified in 2004, consisting of:
- (A) One (1) indoor charge handling system for the three (3) electric induction furnaces, with a total maximum throughput capacity of 20 tons of metal per hour, consisting of three (3) units, identified as P1, P2, and P3, each with a maximum throughput capacity of 10 tons of metal per hour;
- Note: The power control system at the plant limits the total maximum throughput of the charge handling system to 20 tons of metal per hour.
- (B) One (1) melting system, identified as P8, with a maximum capacity of 20 tons of metal per hour, consisting of three (3) electric induction furnaces, each with a melting capacity of 10 tons per hour, utilizing two (2) cartridge collectors for particulate control, **identified as DC-3A and DC-3B**, exhausting to a **common** stack ID Nos. ~~3A and 3B~~;
- Note: The maximum throughput of metal for the melting system is limited to 20 tons per hour by the maximum throughput from the charge handling system of 20 tons of metal per hour.
- (C) One (1) holding system consisting of the following equipment:
- (1) Two (2) electric holding furnaces, identified as P9, each with a holding capacity of 50 tons and a total maximum throughput capacity of 100 tons of metal per hour, ~~utilizing two (2) cartridge collectors for particulate control, exhausting to stack ID Nos. 3A and 3B~~;
- (2) ~~Six (6) ladle heaters to be replaced in 2004, identified as P10, each with a heating capacity of 2.3 million British thermal units (MMBtu) per hour, each combusting natural gas, exhausting to stacks 12A, 12B and 12C.~~ **Two (2) natural gas-fired metal treatment ladle heaters constructed in 2004, each with a rated capacity of 1.0 MMBtu/hr.**
- (3) **Two (2) natural gas-fired pouring ladle heaters (P10) constructed in 2004, each with a rated capacity of 0.4 MMBtu/hr.**
- (D) One (1) inoculation system consisting of two (2) metal treatment ladles ~~to be~~ replaced in 2004 identified as P11, each with a maximum throughput capacity of 10 tons of metal per hour, controlled by Dust Collectors DC-3A and DC-3B for particulate control, exhausting to a common stack 3B.
- (E) **Grinding processes identified as P29 and P30, constructed in 1988, with a total capacity of 12 tons of metal per hour, controlled by dust collector DC-8A, exhausting to stack 8A.**
- ~~(c) Plant 1 Casting Line 1 constructed in 1988 with a capacity of 10 tons of metal and 75 tons of sand per hour, whose total capacity is further restricted by the overall melt capacity of 20 tons of metal/hour for both Lines 1 and 2, consisting of the following equipment:~~

- ~~(1) One (1) sand system consisting of units identified as P32A, P33A, P34A, P35A, P36A, P37A and P39A, controlled by baghouses DC2 and DC3A, exhausting to stacks 2 and 3A.~~
- ~~(2) One (1) pouring station identified as P13A controlled by dust collector DC2, exhausting to stack 2.~~
- ~~(3) One (1) cooling line identified as P14A, controlled by dust collector DC1B, exhausting to stack 1A.~~
- ~~(4) One (1) shakeout unit identified as P16A, controlled dust collectors DC1B and DC2, exhausting to stacks 1B and 2.~~
- ~~(5) Casting conveyors identified as P17A, P18A, P19A, P20A, P21A, P22A, controlled by baghouses DC 6A stack 6A.~~
- ~~(6) Shot blast processes consisting of two shot blast units identified as P26, and P27 with a total capacity of 12 tons of metal/hour, controlled by dust collector DC 8A, exhausting to stack 8A.~~
- ~~(7) Grinding processes identified as P29 and P30, with a total capacity of 12 tons of metal/hour, controlled by dust collector DC 8A, exhausting to stack 8A.~~
- (2) Casting Line 2, constructed in 2004, with a capacity of 15 tons of metal per hour and 70 tons of sand per hour consisting of the following equipment:**
  - (A) One (1) sand system with a maximum capacity of 70 tons of sand per hour, consisting of units identified as P32B, P33B, P34B, P35B, P36B, P37B and P39B, controlled by baghouse BH6400, and exhausting to stack 6400.**
  - (B) One (1) pouring station identified as P13B with a maximum capacity of 15 tons of metal poured per hour, controlled by dust collector DC3B, exhausting to stack 3.**
  - (C) One (1) cooling line identified as P14B, with a maximum capacity of 15 tons of metal per hour, controlled by baghouse BH6200, exhausting to stack 6200.**
  - (D) One (1) shakeout unit identified as P16B, with a maximum capacity of 15 tons of metal per hour, controlled by baghouse BH6200, exhausting to stack 6200.**
  - (E) One (1) bad heat shakeout unit controlled by dust collector DC-5, exhausting to stack 5.**
  - (F) Casting conveyors and desprue operations, identified as P17B, P18B, P19B, P20B, P21B, and P22B, with a maximum capacity of 15 tons of metal per hour, controlled by baghouses DC-7, and DC-8B, exhausting inside the building, and baghouse BH6200 exhausting to stack ID #6200.**
  - (G) One (1) Plant 1, Line 2 shot blast process consisting of three shot blast units identified as P40, P41 and P42 each with a maximum capacity of 5.3 tons of metal per hour and with a combined maximum capacity for all three of 9.0 tons of metal per hour, controlled by dust collector DC-8B, exhausting inside the building.**
- (3) One (1) shotblast unit, identified as Wheelabrator MeshBelt Blast, constructed in**

**2001, with a maximum capacity of 11.0 tons of metal per hour, with particulate matter emissions controlled by a baghouse DC-13 and exhausting internally.**

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

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

**D.2.1 BACT for PM10 [326 IAC 2-2-3]**

(a) Pursuant to 326 IAC 2-2-3, the Permittee shall comply with the following BACT required emission limits for PM10 from the Plant 1, Line 1 processes (PM10 limits include both filterable and condensable).

| Process                  | Stack No. | PM10 Emission Limitation (gr/dscf) | PM10 Limitation (lb/hr) |
|--------------------------|-----------|------------------------------------|-------------------------|
| 2 Metal Treatment Ladles | 3B        | 0.003                              | 1.70                    |

(b)(a) Pursuant to 326 IAC 2-2-3, opacity for stacks Nos. 3A, and 3B, **6200, 6400, and 5** shall not exceed ten percent (10%) for more than three (3) consecutive six (6) minute averaging periods.

(e)(b) The ladle heaters are exclusively natural gas fired and are therefore considered to meet the requirements for BACT.

(c) Pursuant to 326 IAC 2-2-3, the Permittee shall comply with the following BACT required emission limits for PM10 from the Plant 1, Casting Line 2 processes (PM10 limits include both filterable and condensable).

| Stack No.               | Process   | Filterable PM10 Emission Limitation |         | Total PM10 Emission Limitation (lb/ton) (Filterable & Condensable) |
|-------------------------|---|-------------------------------------|---------|--|
|                         |   | (gr/dscf)                           | (lb/hr) |  |
| 3A                      | Melt (P8) & Metal Treatment (P11)   | 0.003                               | 1.7     | 0.633 lb/ton metal   |
| 3B                      | Pouring (P13B), Melt (P8) & Metal Treatment (P11)   | 0.003                               | 1.7     |  |
| 6400                    | Sand Handling (P32B-P37B & P39B)  | 0.003                               | 1.13    | 0.02 lb/ton sand   |
| 6200                    | Casting Cooling (P14B), Shakeout (P16B), Casting conveying (P17B, P18B, P19B, P20B, P21B, P22B) | 0.003                               | 2.85    | 1.045 lb/ton metal   |
| DC-8B (exhausts inside) | Shotblast (P40, P41, & P42) & Casting conveying (P17B, P18B, P19B, P20B, P21B, P22B)            | 0.003                               | 1.03    | 0.085 lb/ton metal   |
| DC-7 (exhausts inside)  | Casting conveying (P17B, P18B, P19B, P20B, P21B, P22B)  | 0.003                               | 0.55    | 0.085 lb/ton metal   |
| 5                       | Bad Heat Shakeout   | 0.003                               | 0.45    | 0.03 lb/ton metal  |

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

~~The charge handling operation (P1, P2, P3) shall comply with the following limits:~~

- ~~(a) Emissions of PM and PM10 shall each not exceed 0.24 pound per hour.~~
- ~~(b) Opacity shall not exceed an average of three percent (3%) based on four (4) consecutive readings using 40 CFR 60, Appendix A, Method 9.~~

~~Compliance with this emission limit shall limit PM and PM10 emissions from the Plant 1 Melting Operations, constructed in 1988, to less than 100 tons per year. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable to this line.~~

~~D.2.3 PSD Minor Limit [326 IAC 2-2]~~

~~Emissions of PM and PM10 and the throughput of metal and sand for Plant 1, Line 1 constructed in 1988, shall be limited as follows:~~

| Process                                       | Material     | PM Emission Limitation (lb/ton material) | Throughput Limit (Tons/12 consecutive month period) |
|---|--------------|--|---|
| 6 Ladle Heaters                               | Metal        | 0.20                                     | 90,000  |
| 2 Metal Treatment Inoculation Ladles          | Metal        | 0.20                                     | 90,000  |
| Melting System (P8) and Holding Furnaces (P9) | Metal melted | 0.20                                     | 90,000  |
| Inoculation (P11)                             | Metal        | 0.20                                     | 90,000  |
| Pouring (P13A)                                | Metal poured | 0.17                                     | 90,000  |
| Castings Cooling (P14A)                       | Metal        | 0.17                                     | 90,000  |
| Shakeout (P16A)                               | Metal        | 0.20                                     | 90,000  |
| Conveying (P17A - P22A)                       | Metal        | 0.16                                     | 90,000  |
| Shotblast Operations (P26 - P27)              | Metal        | 0.20                                     | 90,000  |
| Sand Handling                                 | Mold Sand    | 0.05                                     | 777,600   |
| Grinding (P29 - P30)                          | Metal        | 0.20                                     | 90,000  |

~~Compliance with the throughput limits shall be determined at the end of each month.~~

~~These emission limits and the throughput limits combined with limited PM and PM10 emissions from the charge handling operation, the core making operation, the melt system and inoculation process yield PM and PM10 emissions from the gray iron foundry line 1 constructed in 1988 that are less than 100 tons per year. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable.~~

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

~~Emissions of PM and PM10 from the Charge Handling, Melting and Finishing operations constructed in 1988, shall be limited as follows:~~

- ~~(a) Emissions of PM and PM10 from the charge handling operations (P1, P2, and P3) shall each not exceed 0.24 pound per hour.~~

- (b) **Opacity from the charge handling operations (P1, P2, and P3) shall not exceed an average of three percent (3%) based on four (4) consecutive readings using 40 CFR 60, Appendix A, Method 9.**
- (c) **Emissions of PM and PM10 and the throughput of metal for Plant 1 Operations constructed in 1988, shall be limited as follows:**

| <b>Process</b>              | <b>Material</b>        | <b>PM/PM10 Emission Limitation (lb/ton material)</b> | <b>Throughput Limit of Material (Tons/12 consecutive month period)</b> |
|-----------------------------|------------------------|--|--|
| <b>Melting System (P8)</b>  | <b>Metal Poured</b>    | <b>0.20</b>  | <b>79,000</b>  |
| <b>Holding Furnace (P9)</b> | <b>Metal Poured</b>    | <b>0.10</b>  | <b>79,000</b>  |
| <b>Grinding (P29 – P30)</b> | <b>Metal Processed</b> | <b>0.20</b>  | <b>79,000</b>  |

**Compliance with the throughput limits shall be determined at the end of each month.**

**Compliance with these emission limits and the throughput limits combined with limited PM and PM10 emissions from the core sand handling operation listed in section D.1 limits PM and PM10 emissions from the Plant 1 Operations and core machines constructed in 1988 to less than 100 tons per year. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable.**

**D.2.3 PSD Minor Limits for PM and PM10 [326 IAC 2-2]**

**PM and PM10 emissions from the Wheelabrator MeshBelt Blast unit constructed in 2001 shall be limited as follows:**

- (a) **The PM emission rate shall not exceed 5.7 pounds per hour.**
- (b) **The PM10 emission shall not exceed 3.4 pounds per hour.**

**Compliance with these emission limits will limit PM and PM10 emissions from the Wheelabrator MeshBelt Blast to less than 25 and 15 tons per year, respectively. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable to the modification to construct this unit in 2001.**

**D.2.4 PSD Minor Limits for PM [326 IAC 2-2]**

In order to render PSD not applicable for PM the following limits shall apply:

| Stack No. | Process   | PM Emission Limitation (lb/ton material) | Throughput Limit per 12 consecutive month period) |
|-----------|---|--|---|
| 3 A/B     | Melting System (P8), Metal Treatment (P11) and Pouring (P13B)   | 0.17 lbs/ton metal poured                | 79,000 tons metal poured                          |
| 6400      | Sand Handling (P32B-P37B & P39B)  | 0.016 lbs/ton sand                       | 368,667 tons sand processed                       |
| 6200      | Casting Cooling (P14B), Shakeout (P16B), Casting conveying and Desprue (P17B, P18B, P19B, P20B, P21B, P22B) | 0.19 lbs/ton metal poured                | 79,000 tons metal poured                          |
| 8B        | Shotblast (P40, P41, & P42), Casting Conveyor and Desprue (P17B, P18B, P19B, P20B, P21B and P22B).          | 0.11 lbs/ton metal poured                | 79,000 tons metal poured                          |
| 7         | Casting Conveyor and Desprue (P17B, P18B, P19B, P20B, P21B and P22B).                                       | 0.037 lbs/ton metal poured               | 79,000 tons metal poured                          |

Compliance with the throughput limits shall be determined at the end of each month.

Compliance with these limits along with the potential to emit from the ladle heaters limits PM emissions from all processes installed in 2004 to less than 25 tons/year. Therefore the requirements of 326 IAC 2-2 (PSD) do not apply to the modification in 2004 for PM emissions.

**D.2.45 Particulate [326 IAC 6-3-2]**

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rates from the Plant 1, Line 1 gray **and ductile** iron foundry line shall be limited as follows:

| Unit  | Stack ID | Process Weight Rate (ton per hour) | Allowable Emissions (pounds per hour) |
|---|----------|------------------------------------|---------------------------------------|
| Charge Handling (P1, P2, P3)  | N/A      | 20.0                               | 30.51                                 |
| Melting System – Electric Induction Furnace (P8), and Holding Furnaces (P9), and 2 Metal Treatment Inoculation Ladles (P11) | 3A, 3B   | 20.0                               | 30.51                                 |
| Pouring (P13A)*   | 2        | 85.0                               | 49.67                                 |
| Casting Cooling (P14A)*   | 4A       | 85.0                               | 49.67                                 |
| Shakeout (P16A)*  | 4B       | 85.0                               | 49.67                                 |
| Conveying (P17A – P22A)   | 6B, 7    | 5.0                                | 12.05                                 |
| Grinding (P29 – P30)  | 8A       | 3.0                                | 8.56                                  |

| Unit                                     | Stack ID            | Process Weight Rate<br>(ton per hour) | Allowable Emissions<br>(pounds per hour) |
|--|---------------------|---------------------------------------|--|
| Sand Handling (P32 - P39)                | 2, 3A               | 75.00                                 | 48.43                                    |
| Sand Handling (P32B - P37B & P39B)       | 6400                | 70.0                                  | 47.76                                    |
| Pouring (P13B)*                          | 3B                  | 85.0                                  | 49.67                                    |
| Casting Cooling (P14B)*                  | 6200                | 85.0                                  | 49.67                                    |
| Shakeout (P16B)*                         | 6200                | 85.0                                  | 49.67                                    |
| Bad Heat Shakeout*                       | DC-5                | 85.0                                  | 49.67                                    |
| Casting Conveyors/ Desprue (P17B - P22B) | 6200<br>DC-8B, DC-7 | 15.0                                  | 25.16                                    |
| Shotblast Operations (P40, P41 & P42)    | 8B                  | 9.0                                   | 17.87                                    |
| Grinding (P29 - P30)                     | 8A                  | 12.0                                  | 21.67                                    |
| Wheelabrator MeshBelt Blast              | DC-13               | 11.0                                  | 20.44                                    |

\* Includes metal and sand throughput.

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

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

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

or

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

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

~~D.2.5 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]~~

- ~~(a) VOC emissions from the inoculation operation (P11) shall not exceed 0.005 pound of VOC per ton of metal throughput.~~
- ~~(b) VOC emissions from the pouring operation (P13A), cooling operation (P14A) and shakeout (P16A) combined shall not exceed 0.8 pound of VOC per ton of metal throughput.~~
- ~~(c) The throughput of metal to each of the inoculation (P11), pouring (P13A), and shakeout operations (P16A) shall not exceed 61,500 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.~~

The metal throughput limit and the VOC emission limits yield VOC emissions from the two (2) foundry lines constructed in 1988 that are less than 25 tons per year. Therefore, the requirements of 326 IAC 8-1-6 (New Facilities, General Reduction Requirements) do not apply.

**D.2.6 Volatile Organic Compounds (VOC) [326 IAC 2-2-3][326 IAC 8-1-6]**

Pursuant to 326 IAC 2-2-3 (PSD) and 326 IAC 8-1-6 (BACT), the following conditions shall apply to the pouring station (P13B), cooling line (P14B), shakeout (P16B) and bad heat shakeout processes of Plant 1, Casting Line 2:

- (a) **Material Substitution and Lower-Emitting Processes/Practices shall be used to limit VOC emissions.**
- (b) **VOC emissions shall not exceed 1.2 pounds per ton of metal throughput to the pouring station (P13B), cooling line (P14B), and shakeout operations (P16B) and bad heat shakeout operations combined.**
- (c) **The throughput of metal to the pouring, cooling and shakeout operations (P13B, P14B, and P16B) and bad heat shakeout operations combined shall not exceed 79,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.**
- (d) **An Advanced Oxidation (AO) system with a minimum VOC reduction efficiency of 20% shall be installed.**
- (e) **The AO system shall be installed according to the following schedule:**

- Day 1: Permit issuance.**
- 30 days after permit issuance: INTAT will issue a purchase order for the AO system.**
- 130 days after permit issuance: Site delivery of AO system equipment.**
- 160 days after permit issuance: 90% of the installation will be complete. Remaining installation must be completed during Plant Shutdown.**
- July, 2008 Plant Shutdown: AO system will be connected to INTAT's sand cooling and dust collection systems.**
- 14 Days after Plant Shutdown: Begin Cleanwater Phase (Normal tap water run through system to verify system integrity and no process issues).**
- 35 Days after Plant Shutdown: Begin Clearwater Phase (Hydrogen peroxide slowly introduced to system, slow incremental changes made to sand system to accommodate peroxide effects).**
- 73 Days after Plant Shutdown: Start Blackwater Phase (Dust slowly introduced to AO system, slow incremental changes made to sand system to accommodate effects).**
- 101 Days after Plant Shutdown: Monitor system for stability issues, effects on part quality.**
- 250 Days after Plant Shutdown: Stack testing will be completed.**

#### **D.2.7 CO Emissions PSD Minor Limit [326 IAC 2-2]**

---

- (a) CO emissions from the pouring station (P13B), cooling line (P14B), shakeout (P16B) and bad heat shakeout operations combined shall not exceed 2.5 pounds of CO per ton of metal throughput;
- (b) The throughput of metal to each of the pouring station (P13B), cooling line (P14B), shakeout (P16B) and bad heat shakeout operations combined shall not exceed 79,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with the CO emission limit and the metal throughput limit will limit CO emissions from the units installed in 2004, including the ladle heaters, to less than 100 tons per year. Therefore, the requirements of 326 IAC 2-2 (PSD) do not apply for CO.

#### **D.2.68 Preventive Maintenance Plan [326 IAC 2-7-5(13)]**

---

A Preventive Maintenance Plan, in accordance with Section B – Preventive Maintenance Plan, of this permit, is required for these facilities' and their control devices, **including capture systems.**

### **Compliance Determination Requirements**

#### ~~D.2.7 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]~~

---

- ~~(a) Within 60 days after achieving maximum capacity but no later than 180 days after startup, in order to demonstrate compliance with Conditions D.2.1, the Permittee shall perform PM10 testing (for both filterable and condensable PM10) for the following facilities utilizing methods as approved by the Commissioner
  - ~~(1) the cartridge collector controlling the ladle heaters (P10) exhausting to stack 3A.~~
  - ~~(2) the baghouse controlling the metal inoculation heaters (P11) exhausting to stack 3B.~~~~
- ~~(b) Within 180 days after issuance of this Part 70 permit, in order to demonstrate compliance with Conditions D.2.3 and D.2.4, the Permittee shall perform PM and PM10 testing for the following facilities utilizing methods as approved by the Commissioner:
  - ~~(1) the cartridge collectors controlling the melting system (P8), (P9) and the inoculation operation (P11) exhausting to stacks 3A and 3B;~~
  - ~~(2) the cartridge collector controlling the pouring operation (P13A) exhausting to stack 2;~~
  - ~~(3) the cartridge collector controlling the cooling line, P14A, of the casting cooling operation exhausting to stack 1A. Testing will be required on the cartridge collector;~~
  - ~~(4) the cartridge collectors controlling the shakeout operation (P16A) exhausting to stack 1B;~~
  - ~~(5) the cartridge collectors controlling the conveying operation (P17A – P22A) exhausting to stack 6A;~~
  - ~~(6) the cartridge collectors controlling the shotblast (P26 & P27) and grinding operations (P29 & P30) exhausting to stack 7 and 8A ; and~~
  - ~~(7) the cartridge collectors controlling the sand handling operations (P32A – P37A, & P39A) exhausting to stacks 3A and 2.~~~~

~~These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM10 includes filterable and condensable PM10. Testing shall be conducted in accordance with Section C – Performance Testing.~~

**D.2.9 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]**

---

- (a) In order to demonstrate compliance with Conditions D.2.1(c), D.2.2(c), D.2.3, D.2.4 and D.2.5 the Permittee shall perform PM and PM10 testing for the following facilities utilizing methods as approved by the Commissioner.
- (1) Dust Collector DC-3A/B controlling the melt furnaces, metal treatment stations and pouring operations.
  - (2) Baghouse BH-6400 controlling the sand handling system.
  - (3) Baghouse BH-6200 controlling the cooling operation (P14B), the shakeout process (P16B), the casting conveyors and the desprue operation.
  - (4) Cartridge collector DC-8B controlling the shotblast, casting conveyors and desprue operations.
  - (5) Cartridge Collector DC-7 controlling the casting conveyor and desprue operations.
  - (6) Cartridge collector DC-8A controlling the grinding operation.
- (b) Within 250 days after the July, 2008 plant shutdown, in order to demonstrate compliance with Conditions D.2.6(b) and D.2.7(a), the Permittee shall perform VOC and CO testing for the pouring station (P13B), cooling line (P14B), and shakeout (P16B) operations. utilizing methods as approved by the Commissioner.
- (c) The tests required in (a) and (b) above shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM10 includes filterable and condensable PM10. Testing shall be conducted in accordance with Section C – Performance Testing.

**D.2.810 Particulate Control [326 IAC 2-7-6(6)]**

---

- (a) In order to comply with conditions D.2.1, D.2.2, D.2.3, and D.2.4, and D.2.5 the **baghouses and** cartridge collectors for particulate control shall be in operation and control emissions from the melting, ~~ladle heaters,~~ inoculation, pouring, cooling, shakeout, **casting** conveying, **desprue,** shotblasting, **and** grinding, ~~and sand handling~~ processes at all times that these facilities are in operation.
- (b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

**D.2.11 VOC Control [326 IAC 2-2-3] [326 IAC 8-1-6]**

---

In order to comply with Condition D.2.6, within twelve (12) months after the July, 2008 plant shutdown when the AO system is to be installed, the AO system shall be in operation and control VOC emissions from the pouring station (P13B), cooling line (P14B), shakeout (P16B) and bad heat shakeout processes at all times these processes are in operation.

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

### D.2.912 Visible Emissions Notations

---

- (a) Visible emission notations of the charge handling operation and the stack exhausts **3, 6200, 6400, 5, and 8A** for the melting, ~~ladle heating~~, inoculation, pouring, cooling, shakeout, **casting** conveying, **desprue**, shotblasting, **and** grinding, ~~and sand handling~~ processes shall be performed once per day during normal daylight operations ~~when exhausting to the atmosphere~~. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable steps in accordance with Section C – Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C – Response to Excursions or Exceedances shall be considered a deviation from this permit.

### D.2.4013 Parametric Monitoring

---

The Permittee shall record the pressure drop across each of the baghouses **BH-6200 and BH-6400** and cartridge collectors **DC-3A/DC-3B, DC-7, DC-8A, DC-8B, DC-5, and DC13** used in conjunction with the melting, ~~ladle heating~~, inoculation, pouring, cooling, shakeout, **casting** conveying, **desprue**, shotblasting, grinding, ~~and sand handling~~ **bad heat shakeout, and Wheelabrator MeshBelt Blast** processes, at least once per day when the melting, inoculation, pouring, cooling, shakeout, **casting** conveying, **desprue**, shotblasting, grinding, ~~and sand handling~~ **bad heat shakeout, and Wheelabrator MeshBelt Blast** processes are in operation ~~when venting to the atmosphere~~. When for any one reading, the pressure drop across any of the cartridge collectors is outside the normal range of ~~4-0~~ **0.5** and ~~6-0~~ **8.0** inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C – Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C – Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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

### D.2.4114 Broken or Failed Baghouse and Cartridge Collector Detection

---

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

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

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

#### **D.2.15 Parametric Monitoring of Advanced Oxidation (AO) System**

---

- (a) **Upon commencing initial operation of the AO system or equivalent system, the Permittee shall monitor and record the ultra-sonic power of the AO system or equivalent system used in conjunction with the pouring station (P13B), cooling line (P14B), shakeout (P16B) and bad heat shakeout processes, at least once per day when the pouring station (P13B), cooling line (P14B), shakeout (P16B) and bad heat shakeout processes are in operation. When for any one reading, the ultra-sonic power is less than 1100 W or a minimum established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. An ultra-sonic power reading that is below the above mentioned minimum is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.**
- (b) **Upon commencing initial operation of the AO system or equivalent system, the Permittee shall monitor and record the ozone generator plasma voltage of the AO system or equivalent system used in conjunction with the pouring station (P13B), cooling line (P14B), shakeout (P16B) and bad heat shakeout processes, at least once per day when the pouring station (P13B), cooling line (P14B), shakeout (P16B) and bad heat shakeout processes are in operation. When for any one reading, the ozone generator plasma voltage is less than 2400 V or a minimum established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. An ozone generator plasma voltage reading that is below the above mentioned minimum is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.**
- (c) **Upon commencing initial operation of the AO system or equivalent system, the Permittee shall monitor and record the hydrogen peroxide usage of the AO system or equivalent system used in conjunction with the pouring station (P13B), cooling line (P14B), shakeout (P16B) and bad heat shakeout processes, at least once per day when the pouring station (P13B), cooling line (P14B), shakeout (P16B) and bad heat shakeout processes are in operation. When for any one reading, the hydrogen peroxide is less than 1 gallon per hour of muller operation, or a minimum established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A peroxide usage reading that is below the above mentioned minimum is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.**

**The instruments used for determining the ultra-sonic power, the ozone generator plasma voltage and the hydrogen peroxide usage shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.**

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

#### **~~D.2.12 Record Keeping Requirements~~**

---

~~(a) To document compliance with Condition D.2.3, the Permittee shall maintain the following records:~~

~~(1) The metal throughput to the melting, inoculation, pouring, cooling, shakeout, conveying, shotblasting, and grinding operations for each month.~~

~~(2) The sand throughput to the sand handling operation for each month.~~

~~Records of metal throughput to the inoculation, pouring, cooling, and shakeout operations shall also be used to document compliance with condition D.2.5(d). Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.~~

~~(b) To document compliance with Condition D.2.9, the Permittee shall maintain records of visible emission notations of the charge handling operation and the stack exhausts for the melting, inoculation, pouring, cooling, shakeout, conveying, shotblasting, grinding, and sand handling processes once per day.~~

~~(c) To document compliance with Condition D.2.10, the Permittee shall maintain once per day records of the pressure drop during normal operation when venting to the atmosphere.~~

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

#### **D.2.16 Record Keeping Requirements**

---

**(a) To document compliance with Conditions D.2.2(c) and D.2.4, D.2.6(c) and D.2.7(b), the Permittee shall maintain records of the tons of metal poured on Casting Line 2 operations per month, with compliance determined at the end of each month.**

**(b) To document compliance with Condition D.2.4, the Permittee shall maintain records of the tons of mold sand processed on Casting Line 2 operations per month, with compliance determined at the end of each month.**

**(c) To document compliance with Condition D.2.2(c), the Permittee shall maintain records of the tons of metal throughput to the grinding processes P29 and P30 per month, with compliance determined at the end of each month.**

**(d) To document compliance with Condition D.2.9, the Permittee shall maintain records of visible emission notations of the stack exhausts from stacks 3, 6200, 6400, 5 and 8A once per day. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).**

**(e) To document compliance with Condition D.2.10, the Permittee shall maintain once per day records of the pressure drop. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).**

- (f) **To document compliance with Condition D.2.12, the Permittee shall maintain records of the ultra-sonic power, the ozone generator plasma voltage, and the hydrogen peroxide usage of the AO system.**
- (g) **All records shall be maintained in accordance with Section C- General Record Keeping Requirements, of this permit.**

#### D.2.137 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions **D.2.2(c)**, **D.2.34**, **D.2.6(c)** and ~~D.2.5(d)~~ **D.2.7(b)** shall be submitted to the address listed in Section C – General Reporting Requirements of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

15. Section D.3 has been removed since it was combined with section D.2 above.

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

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

- (d) Plant 1, Casting Line 2 to be constructed in 2004, with a capacity of 15 tons of metal per hour and 70 tons of sand per hour consisting of the following equipment:
  - (1) One (1) sand system consisting of units identified as P32B, P33B, P34B, P35B, P36B, P37B and P39B, controlled by baghouses, BH1-6300 and BH1-6400, and exhausting to stack 1-6300/6400 (1-6300/6400 is a single stack).
  - (2) One (1) pouring station identified as P13B controlled by dust collector DC3B, exhausting to stack 3B.
  - (3) One (1) cooling line identified as P14B, controlled by baghouse BH1-6200, exhausting to stack 1-6200.
  - (4) One (1) shakeout unit identified as P16B, controlled by baghouse BH1-6200, exhausting to stack 1-6200.
  - (5) One (1) lad heat shakeout unit controlled by dust collector DC-5, exhausting to stack 5.
  - (6) Casting conveyors, identified as P17B, P18B, P19B, P20B, P21B, and P22B, controlled by baghouses DC-7, and DC-8B, exhausting inside the building, and baghouse DC-6B exhausting to stack 6B.
  - (7) One (1) Plant 1, Line 2 shot blast process consisting of three shot blast units identified as P40, P41 and P42 each with a maximum capacity of 5.3 tons of metal per hour and with a combined maximum capacity for all three of 11.3 tons of metal per hour, controlled by dust collector DC-8B, exhausting inside the building.

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

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

##### **D.3.1 BACT for PM10**

- (a) Pursuant to 326 IAC 2-2-3, the Permittee shall comply with the following BACT required emission limits for PM10 from the Plant 1, Line 2 processes (PM10 limits include both

~~filterable and condensable).~~

- (b) ~~The OAQ may revise this permit to adjust the total PM10 condensable limitation based on the results of stack test required in Condition D.3.6. The Department will provide an opportunity for public notice and comment prior to finalizing any permit revision.~~
- (c) ~~Total PM10 (including filterable and condensable) emissions from melting, pouring, cooling, shakeout, conveying, shotblast, sand handling and bad heat shakeout operations of Plant 1, Line 2 shall not exceed 1.813 pounds per ton of metal.~~

| Stack No.                      | Process  | Collector Air Flow Rate (cu. ft /min) | Filterable PM10 Emission Limitation |                 | Total PM10 Emission Limitation (lb/ton) (Filterable & Condensable) |
|--------------------------------|--|---------------------------------------|-------------------------------------|-----------------|--|
|                                |  |                                       | (gr/dscf)                           | (lb/hr)         |  |
| <del>3B</del>                  | <del>Pouring, Melt &amp; Metal Treatment</del>   | <del>66,225</del>                     | <del>0.003</del>                    | <del>1.7</del>  | <del>0.633</del>   |
| <del>1-6300 &amp; 1-6400</del> | <del>Sand Handling (P32B-P37B &amp; P39B)</del>  | <del>44,000</del>                     | <del>0.003</del>                    | <del>1.13</del> | <del>0.02</del>  |
| <del>1-6200</del>              | <del>Casting Cool (P14B), Shakeout (P16B) &amp; Sand Handling (P32B-P37B &amp; P39B)</del> | <del>111,000</del>                    | <del>0.003</del>                    | <del>2.85</del> | <del>1.045</del>   |
| <del>6B</del>                  | <del>Shotblast (P40, 41, &amp; 42)</del>   | <del>40,000</del>                     | <del>0.003</del>                    | <del>1.03</del> | <del>0.085</del>   |
| <del>5</del>                   | <del>Bad Heat Shakeout</del>   | <del>17,400</del>                     | <del>0.003</del>                    | <del>0.45</del> | <del>0.03</del>  |
| <del>Total</del>               |  |                                       |                                     |                 | <del>1.813</del>   |

- (d) ~~Pursuant to 326 IAC 2-2-3, opacity for stacks No. 3B, 1-6200, 6B, 1-6300/6400 and 5 shall not exceed ten percent (10%) for more than three (3) consecutive six (6) minute averaging periods.~~

D.3.2 PM Emissions

~~In order to render PSD not applicable for PM the following limits shall apply:~~

- (a) ~~PM filterable emissions from pouring, cooling, shakeout, conveying, shotblast, sand handling and bad heat shakeout operations of Plant 1, Line 2 shall not exceed 0.003 gr/dscf, equivalent to 0.38 pounds per ton of metal.~~
- (b) ~~Metal throughput to Plant 1, Casting Line 2 shall not exceed 61,500 tons per 12 consecutive month period with compliance determined at the end of each month. During the first 12 months of operation the limit shall be 5,125 tons per month.~~
- (c) ~~Sand throughput to Plant 1, casting Line 2 shall not exceed 215,230 tons per 12 consecutive month period with compliance determined at the end of each month. During the first 12 months of operation the limit shall be 17,935 tons per month.~~

D.3.3 Particulate [326 IAC 6-3-2]

~~Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rates from the Line 2 gray iron foundry line shall be limited as follows:~~

| Unit                       | Stack ID      | Process Weight Rate (ton per hour) | Allowable Emissions (pounds per hour) |
|----------------------------|---------------|------------------------------------|---------------------------------------|
| <del>Pouring (P13B)*</del> | <del>3B</del> | <del>85.0</del>                    | <del>49.67</del>                      |

|                                     |                      |      |       |
|-------------------------------------|----------------------|------|-------|
| Casting-Cooling (P14B)*             | 1-6200               | 85.0 | 49.67 |
| Shakeout (P16B)*                    | 1-6200               | 85.0 | 49.67 |
| Conveying (P17B-P22B)               | 6B & 8B              | 15.0 | 25.16 |
| Shotblast Operations (P40, 41 & 42) | 6B                   | 9.0  | 17.87 |
| Sand Handling (P32B-P37B & P39B)    | 1-6200 & 1-6300/6400 | 70.0 | 47.76 |

\* Includes metal and sand throughput

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

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

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

or

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

$$E = 55.0 P^{0.14} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

#### ~~D.3.4 VOC Emissions [326 IAC 2-2] [326 IAC 8-1-6]~~

In order to render the requirements of 326 IAC 2-2 (PSD) and 326 IAC 8-1-6 (BACT) not applicable for VOCs, the following conditions shall apply:

- (a) The metal throughput to Line 2 of the Plant 1 process shall not exceed 61,500 tons per 12 consecutive month period, with compliance determined at the end of each month.
- (b) VOC emissions shall not exceed 0.8 lb/ton of metal from the pouring, cooling, shakeout and bad heat shakeout combined.
- (c) The sand throughput to Line 2 of the Plant 1 process shall not exceed 215,230 tons per 12 consecutive month period, with compliance determined at the end of each month.

These limits will equate to a total VOC emissions level from the Plant 1 operations of less than 25 tons of VOC per 12 consecutive month period, therefore the requirements of PSD and 326 IAC 8-1-6 will not apply.

#### ~~D.3.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]~~

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

### **Compliance Determination Requirements**

#### ~~D.3.6 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]~~

- (a) Within 60 days after achieving maximum capacity but no later than 180 days after startup, in order to demonstrate compliance with Conditions D.3.1 and D.3.2, D.3.3 the Permittee shall perform PM and PM10 testing (for both filterable and condensable PM10) for the following facilities utilizing methods as approved by the Commissioner.

- (1) ~~the baghouse, DC3B, controlling the pouring operation (P13B) exhausting to stack 3B.~~
  - (2) ~~the baghouse BH1-6200 controlling the cooling operation (P14B) and the shakeout process (P16B) exhausting to stack 1-6200.~~
  - (3) ~~the baghouse DC-6B and the cartridge collector DC-8B controlling the casting conveyor and the shotblast system, exhausting to stack 6B.~~
  - (4) ~~baghouses BH 1-6300 and BH 1-6400 controlling the sand handling system exhausting to stack 1-6300/6400.~~
- (b) ~~Within 60 days after achieving maximum capacity but no later than 180 days after startup of the Line 2 modifications in order to demonstrate compliance with Condition D.3.4, the Permittee shall perform VOC testing for the pouring (P13B), cooling (P14B), and the shakeout (P16B) operations exhausting to stacks 3B and 1-6200 utilizing methods as approved by the Commissioner.~~
- ~~These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.~~

#### ~~D.3.7 Particulate Control [326 IAC 2-7-6(6)]~~

---

- (a) ~~Pursuant to CP 139-8845-00011, issued on December 10, 1997, and in order to comply with conditions D.3.1 and D.3.2, the cartridge collectors and baghouses for particulate control shall be in operation and control emissions from the pouring, cooling, shakeout, conveying, shotblasting, and sand handling processes at all times that these facilities are in operation.~~
- (b) ~~In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.~~

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

#### ~~D.3.8 Visible Emissions Notations~~

---

- (a) ~~Visible emission notations of the stack exhausts for the pouring, cooling, shakeout, conveying, shotblasting, bad heat shakeout and sand handling processes shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.~~
- (b) ~~For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.~~
- (c) ~~In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.~~
- (d) ~~A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.~~
- (e) ~~If abnormal emissions are observed, the Permittee shall take reasonable steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take~~

~~response steps in accordance with Section C – Response to Excursions or Exceedances shall be considered a deviation from this permit.~~

#### ~~D.3.9 Parametric Monitoring~~

~~The Permittee shall record the pressure drop across each of the baghouses and cartridge collectors used in conjunction with the pouring, cooling, shakeout, conveying, shotblasting and sand handling, grinding and Wheelabrator MeshBelt Blast processes, at least once per day when the pouring, cooling, shakeout, conveying, shotblasting and sand handling processes are in operation when venting to the atmosphere. When for any one reading, the pressure drop across any of the baghouses is outside the normal range of 1.0 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C – Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C – Response to Excursions or Exceedances, shall be considered a deviation from this permit.~~

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

#### ~~D.3.10 Broken or Failed Baghouse and Cartridge Collector Detection~~

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

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

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

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

#### ~~D.3.11 Record Keeping Requirements~~

~~(a) To document compliance with Condition D.3.2, the Permittee shall maintain records of the amount of sand and metal throughput of the operation.~~

~~(b) To document compliance with Condition D.3.9, the Permittee shall maintain once per day records of the pressure drop during normal operation when venting to the atmosphere.~~

~~(c) To document compliance with Condition D.3.8, the Permittee shall maintain records of visible emission notations of the charge handling operation and the stack exhausts for the melting, inoculation, pouring, cooling, shakeout, conveying, shotblasting and sand handling processes taken once per day.~~

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

#### D.3.12 Reporting Requirements

~~A quarterly summary of the information to document compliance with Condition D.3.4 shall be submitted to the address listed in Section C – General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).~~

16. Section D.4, now re-numbered D.3, is revised to include the changes pursuant to the Stay Agreement and other changes requested by INTAT Precision, Inc. in this modification as follows:

### SECTION D.43 FACILITY OPERATION CONDITIONS

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

- ~~(e)~~(d) Plant 2, one (1) ~~gray ductile~~ iron foundry line, constructed in 1997, consisting of the following:
- (1) One (1) indoor charge handling system, identified as ID #1000A, with a maximum capacity of 10 tons of metal per hour;
  - (2) One (1) melting, and **inoculation and pouring system**, identified as ID #1000 **1110, 1150 and 2000, respectively**, with a maximum capacity of 10 tons of metal per hour, utilizing a baghouse (ID # BH6100 **6010**) for particulate control, exhausting to stack ID #6100 **6010**, consisting of the following equipment:
    - (A) Two (2) electric induction furnaces, each with a maximum capacity of 10 tons of metal per hour;
    - (B) One (1) electric holding furnace (**uncontrolled**);
    - (C) Two (2) natural gas-fired ladle heaters, identified as ID #6600 and 6610, each with a maximum heat input rate of 2 MMBtu per hour;

Note: The maximum throughput of metal for the melting and pouring system is limited to 10 tons of metal per hour by the maximum throughput from the charge handling system of 10 tons of metal per hour and the power control systems at the plant.
  - (3) One (1) mold/~~casting cooling system~~ **machine**, identified as ID #2000 **2010**, with a maximum capacity of 10 tons of metal per hour and 70 tons of sand per hour, utilizing one (1) baghouse (ID # BH6200 **6010**) for particulate control, exhausting to stack ID#s 6200A and 6200B **6010**;
  - (4) **One (1) casting cooling and conveyor system, identified as #2015 and 2020, respectively, with a maximum capacity of 10 tons of metal per hour and 70 tons of sand per hour, utilizing two (2) baghouses (ID # BH6020 and 6030) for particulate control exhausting to stack ID#s 6020 and 6030A and 6030B;**
  - ~~(4)~~(5) One (1) casting shakeout system, identified as ID #3000 **3010**, with a maximum capacity of 10 tons of metal per hour and 70 tons of sand per hour, utilizing one (1) baghouse (ID #BH6200 **6030**) for particulate control, exhausting to stack ID#s 6200A and 6200B **6030A and 6030B;**
  - ~~(5)~~(6) One (1) sand and waste sand handling system, identified as ID #4000, **#4140, and 5000**, with a maximum capacity of 70 tons of sand per hour, utilizing two (2) baghouses (BH6300 and BH6400 **6020 and 6040**) for particulate control, exhausting to stack ID #s 6300 and 6400 **6020 and 6040;**

(7) **Two (2) shot blast units, identified as Pre-Blast ID #3055 and Final Blast ID #3090, each with a maximum capacity of 10 tons of metal per hour, utilizing one (1) baghouse (BH #6030) for particulate control, exhausting to stack ID # 6030A and 6030B;**

~~(6)~~(8) One (1) finishing operation, identified as ID #8000, with a maximum capacity of 5.5 tons of metal per hour, consisting of trim presses, uncontrolled.

**Insignificant Activities:**

(i)(1) Six (6) bench grinders, identified as ID #8000, with maximum capacity of 5.5 tons of metal per hour, utilizing fabric filters (FFA, FFB, FFC, FFD, and FFE) for control; four (4) grinders each controlled by one fabric filter, and two (2) grinders controlled by one (1) fabric filter, **all exhausting inside the building.** [326 IAC 6-3-2]

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

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

**D.43.1 PSD Minor Limit [326 IAC 2-2]**

The charge handling operation (1000A) shall comply with the following limits:

- (a) Emissions of PM and PM10 shall each not exceed 0.12 pound per hour.
- (b) Opacity shall not exceed an average of three percent (3%) based on four (4) consecutive readings using 40 CFR 60, Appendix A, Method 9.

This emission limit, in addition to the emission limits listed in condition D.34.2, yield PM and PM10 emissions from the ~~one (1) gray~~ **Plant 2, ductile** iron foundry line, constructed in 1997, that are each less than 100 tons per year. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable.

**D.43.2 PSD Minor Limit [326 IAC 2-2]**

Emissions of PM and PM10 and the throughput of metal and sand for the ~~one (1) gray~~ **Plant 2, ductile** iron foundry line, constructed in 1997, shall be limited as follows:

| Process  | Material | Control Device ID | PM/PM10 Emission Limitation (lb/ton material) | Throughput Limit of Material (tons per 12 consecutive month period) |
|--|----------|-------------------|---|---|
| Melting, & Pouring and Inoculation ( <del>4000</del> 1110, 2000, and 1150) | Metal    | 6010              | <del>0.70</del> 0.50                          | <del>70,000</del> 61,500 (metal)                                    |
| Holding Furnace  | Metal    | NA                | 0.10  | 61,500 (metal)  |
| <del>Mold/Casting Cooling and conveyor system (2000</del> 2015 and 2020)   | Metal    | 6020, 6030        | 0.60<br>0.80                                  | 70,000<br>70,000  |
| Shakeout ( <del>3000</del> 3010)   | Metal    | 6030              | 1.45 (for control device 6030)                | 61,500 (metal)  |
| Pre-Blast (3055) and Final Blast (3090)                                    |          | 6030              |   |   |

| Process  | Material  | Control Device ID | PM/PM10 Emission Limitation (lb/ton material) | Throughput Limit of Material (tons per 12 consecutive month period) |
|--|-----------|-------------------|---|---|
| Sand & Waste Sand Handling System (4000, 4140, and 5000) | Mold Sand | 6020, 6040        | 0.10<br><b>0.11 (for control device 6020)</b> | 490,000<br><b>430,500 (mold sand)</b>                               |
|  |           |                   | <b>0.05 (for control device 6040)</b>         |   |
| Grinding/Cleaning (8000)                                 | Metal     | FFA - FFE         | 0.03<br><b>0.06</b>                           | 48,180 (Maximum throughput metal)                                   |

Compliance with the throughput limits shall be determined at the end of each month.

These emission limits and the throughput limits, combined with limited PM and PM10 emissions from the charge handling operation (**1000A**), yield PM and PM10 emissions from the ~~one (1) gray~~ **Plant 2, ductile** iron foundry line constructed in 1997 that are each less than 100 tons per year. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable. Any emissions from the electric holding furnace are accounted for in the emissions from melting in the electric induction furnaces.

**D.43.3 Particulate [326 IAC 6-3-2]**

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rates from the ~~one (1) gray~~ **Plant 2, ductile** iron foundry line shall be limited as follows:

| Unit  | Stack ID Control Device ID         | Process Weight Rate (ton per hour) | Allowable Emissions (pounds per hour) |
|---|------------------------------------|------------------------------------|---------------------------------------|
| Charge Handling (1000A)   | NA                                 | 10.0                               | 19.18                                 |
| Melting, & Pouring and Inoculation (4000 1110, 2000, and 1150)            | <del>6400</del> <b>6010</b>        | 10.0                               | 19.18                                 |
| <b>Holding Furnace</b>  | <b>Uncontrolled</b>                | <b>10.0</b>                        | <b>19.18</b>                          |
| <del>Mold/Casting Cooling and conveyor system (2000 2015 and 2020)*</del> | <del>6200A</del> <b>6020, 6030</b> | 80.0                               | 49.06                                 |
| Casting Shakeout (3000 3010)*   | <del>6200B</del> <b>6030</b>       | 80.0                               | 49.06                                 |
| <b>Pre-Blast (3055)</b>   | <b>6030</b>                        | <b>10.0</b>                        | <b>19.18</b>                          |
| <b>Final Blast (3090)</b>   | <b>6030</b>                        | <b>10.0</b>                        | <b>19.18</b>                          |
| Sand & Waste Sand Handling (4000, 4140, and 5000)                         | <del>6300</del> <b>6020, 6040</b>  | 70.0                               | 47.77                                 |
| Grinding/Cleaning (8000)  | NA <b>FFA - FFE</b>                | 5.50                               | 12.85                                 |

\* Includes metal and sand throughput.

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

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

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

or

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

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

**D.43.4 Volatile Organic Compounds (VOC)[326 IAC 2-2-3] [326 IAC 8-1-6]**

- (a) VOC emissions from the ~~pouring operations (1000) and cooling operation (2000) and shakeout operation (3000)~~ **melting operation (1110), inoculation operation (1150), pouring operation (2000), the casting cooling and conveyor system (2015 and 2020), and the casting shakeout system (3010)** combined shall not exceed 0.8 pound of VOC per ton of metal throughput;
- (b) The throughput of metal to each of the ~~pouring (1000), cooling (2000), and shakeout operation (3000)~~ **melting operation (1110), inoculation operation (1150), pouring operation (2000), the casting cooling and conveyor system (2015 and 2020), and the casting shakeout system (3010)** shall not exceed 61,500 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

The metal throughput limit and the VOC emission limits yield VOC emissions from the ~~one (1)~~ **Plant 2, ductile iron** foundry line constructed in 1997 that are less than 25 tons per year. Therefore, the requirements of 326 IAC 8-1-6 (New Facilities, General Reduction Requirements) do not apply.

**D.4.5 Hazardous Air Pollutants (HAPs) [326 IAC 2-4.1-1]**

Emissions of manganese for the ~~one (1)~~ gray iron foundry line, constructed in 1997, shall be limited as follows:

| <b>Process</b>                         | <b>Manganese Emission Limitation (lb/hr)</b> |
|--|--|
| <del>Melting/Pouring (1000)</del>      | 1.92   |
| <del>Mold/Casting Cooling (2000)</del> | 0.01   |
| <del>Shakeout (3000)</del>             | 0.28   |
| <del>Grinding/Cleaning (8000)</del>    | 0.06   |

These emission limits yield manganese emissions from the ~~one (1)~~ gray iron foundry line constructed in 1997 that are less than 10 tons per year. Therefore, the requirements of 326 IAC 2-4.1-1 (New Source Toxics Control) are not applicable.

**D.3.5 CO Emissions PSD Minor Limit [326 IAC 2-2]**

- (a) CO emissions from the ~~pouring operation (2000), the casting cooling and conveyor system (2015 and 2020), and the casting shakeout system (3010)~~ combined shall not exceed 3.2 pounds of CO per ton of metal throughput;
- (b) The throughput of metal to each of the ~~pouring operation (2000), the casting cooling and conveyor system (2015 and 2020), and the casting shakeout system (3010)~~ combined shall not exceed 61,500 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

**Compliance with the CO emission limit and the metal throughput limit will limit CO emissions from the Plant 2, ductile iron foundry line constructed in 1997, including the ladle heaters, to less than 100 tons per year. Therefore, the requirements of 326 IAC 2-2 (PSD) do not apply for CO.**

**D.43.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]**

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

**Compliance Determination Requirements**

**D.43.7 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]**

- (a) ~~During the period between January, 2005 and June, 2005, in order to demonstrate compliance with Conditions D.43.2, and D.43.3, and D.4.5, the Permittee shall perform PM, and PM-10, and manganese testing for the following facilities utilizing methods as approved by the Commissioner:~~
- (1) the baghouse controlling the melting, & pouring **and inoculation** operations (~~4000 1110, 2000, and 1150~~) exhausting to stack ~~6400 6010~~;
  - (2) the baghouses controlling the ~~molten~~ casting cooling **and conveyor** system (~~2000 2015 and 2020~~) exhausting to stacks ~~6200A 6020, 6030A and 6030B~~;
  - (3) the baghouse controlling the shakeout operation (~~3000 3010~~) exhausting to stacks ~~6200B 6030A and 6030B~~;
  - (4) the baghouses controlling the sand **and waste sand** handling system (4000, **4140, and 5000**) exhausting to stacks ~~6300 6020 and 6040~~ (PM and PM10 testing only);
  - ~~(5) the baghouse controlling the waste sand handling system (7000) exhausting to stack 6400 (PM and PM-10 testing only); and~~
  - ~~(6)~~**(5)** the one dust collector **(1) fabric filter** controlling two (2) **bench** grinders, exhausting to **the** room.

These tests shall be repeated at least once every five (5) years from the date of ~~this~~ **the most recent** valid compliance demonstration. PM-10 includes filterable and condensable PM-10. Testing shall be conducted in accordance with Section C - Performance Testing.

- (b) ~~Within 180 days after issuance of this Part 70 permit, in order to demonstrate compliance with Condition D.43.4, the Permittee shall perform VOC testing for the pouring (4000), cooling (2000), and shakeout operation (3000) melting operation (1110), inoculation operation (1150), pouring operation (2000), the casting cooling and conveyor system (2015 and 2020), and the casting shakeout system (3010) utilizing methods as approved by the Commissioner. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.~~
- (c) **In order to demonstrate compliance with Condition D.3.5, the Permittee shall perform CO testing for the pouring operation (2000), the casting cooling and conveyor system (2015 and 2020), and the casting shakeout system (3010) utilizing methods as approved by the Commissioner. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.**

#### D.43.8 Particulate Control [326 IAC 2-7-6(6)]

---

- (a) Pursuant to CP-139-8845-00011, issued on December 10, 1997, and in order to comply with Conditions D.43.2 and D.43.3, the baghouses and fabric filters for particulate and metallic HAP control shall be in operation and control emissions from the melting, pouring, **inoculation**, cooling, shakeout, sand handling, waste sand handling, and grinding/cleaning processes **and the pre-blast and final blast shot blast machines** at all times that these facilities are in operation.
- (b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

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

#### D.43.9 Visible Emissions Notations

---

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

#### D.43.10 Parametric Monitoring

---

The Permittee shall record the pressure drop across each of the baghouses used in conjunction with the melting, pouring, **inoculation**, cooling, shakeout, sand handling, waste sand handling, and grinding/cleaning processes **and the pre-blast and final blast shot blast machines**, at least once per day when the melting, pouring, **inoculation**, cooling, shakeout, sand handling, waste sand handling, and grinding/cleaning processes **and the pre-blast and final blast shot blast machines** are in operation ~~when venting to the atmosphere~~. When for any one reading, the pressure drop across any of the baghouses is outside the normal range of ~~4.0~~ **0.5** and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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

#### D.43.11 Broken or Failed Bag and Cartridge Collector Detection

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

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

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

#### D.43.12 Record Keeping Requirements

- ~~(a)~~ To document compliance with Condition D.4.9, the Permittee shall maintain records of visible emission notations of the charge handling operation and the stack exhausts for the melting, pouring, cooling, shakeout, conveying, shotblasting and sand handling, processes taken once per day.
- (a) To document compliance with Conditions D.3.2, D.3.4, and D.3.5, the Permittee shall maintain records of the monthly metal throughput to the Melting, Pouring and Inoculation operations (1110, 2000, and 1150), the holding furnace, Casting Cooling and Conveyor system (2015 and 2020), the casting shakeout system (3010), the Pre-Blast (3055) and Final Blast (3090), and the grinding/cleaning process (8000).**
- (b) To document compliance with Condition D.3.2, the Permittee shall maintain records of the monthly sand throughput to the Sand & Waste Sand Handling System (4000, 4140, and 5000).**
- (c) To document compliance with Condition D.3.9, the Permittee shall maintain records of visible emission notations of the charge handling operation and the stack exhausts for the melting, pouring, inoculation, cooling, shakeout, sand handling, waste sand handling, and grinding/cleaning processes and the pre-blast and final blast shot blast machines taken once per day. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).**
- ~~(b)(d)~~ **To document compliance with Condition D.43.10, the Permittee shall maintain once per day records of the pressure drop during normal operation when venting to the atmosphere. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).**
- ~~(e)(e)~~ **All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.**

#### D.43.13 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions **D.3.2**, **D.43.4**, and **D.3.5** shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

17. Section D.5, now re-numbered D.4, has been revised to include the requirements of the NESHAP, 40 CFR 63, Subpart M MMMM applicable to the surface coating booth CO5 as follows:

### SECTION D.54 FACILITY CONDITIONS

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

Insignificant Activities:

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units (Btu) per hour;
  - (1) Two (2) boilers, identified as P40 and P41, with a maximum heat capacity of 0.9 and 1.2 million British units per hour, respectively, each combusting natural gas; **[326 IAC 6-2-4]**
- (b) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6 (Maintenance parts cleaner using mineral spirits solvent that is 100% recycled, with a maximum throughput of 120 gallons per 12 months); [326 IAC 8-3-2]
- (c) Other activities or categories not previously identified:
  - (1) One (1) paint booth, identified as CO5, used for machine part maintenance coating operations, with a maximum throughput rate of 120 metal units per hour, utilizing dry filters for particulate control, exhausting inside the building or through stack No. S-CO5. [326 IAC 6-3-2][**40 CFR 63, Subpart M MMMM**]
  - (2) **All storage containers and mixing vessels in which coatings, thinners and/or other additives, and cleaning materials are stored or mixed; [40 CFR 63, Subpart M MMMM]**
  - (3) **All manual and automated equipment and containers used for conveying coatings, thinners and/or other additives, and cleaning materials; [40 CFR 63, Subpart M MMMM] and**
  - (4) **All storage containers and all manual and automated equipment and containers used for conveying waste materials generated by a coating operation. [40 CFR 63, Subpart M MMMM]**

**Under the Surface Coating of Miscellaneous Metal Parts and Products NESHAP (40 CFR 63, Subpart M MMMM), the one (1) paint booth, identified as CO5, is considered an existing affected source.**

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

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

##### D.54.1 Particulate Matter (PM) [326 IAC 6-2]

Pursuant to 326 IAC 6-2-4(a) (Particulate Emission Limitations for Sources of Indirect Heating), for Q less than 10 MMBtu per hour, the pounds of PM emitted per million Btu heat input shall not exceed 0.6 pound per MMBtu. Therefore, PM emissions from each of the boilers, identified as P40 and P41, shall not exceed 0.6 pound per MMBtu heat input.

**D.54.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]**

---

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

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

**D.54.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]**

---

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the one (1) paint booth and its control device.

**D.54.4 Particulate [326 IAC 6-3-2(d)]**

---

Pursuant to 326 IAC 6-3-2(d), particulate from the one (1) paint booth, identified as # CO5, shall be controlled by a dry particulate filter, and the Permittee shall operate the control device in accordance with manufacturer's specifications.

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

**D.4.5 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants under 40 CFR Part 63 [326 IAC 20-1] [40 CFR Part 63, Subpart A]**

---

- (a) Pursuant to 40 CFR 63.3901, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1-1 for:

- (1) One (1) paint booth, identified as CO5, used for machine part maintenance coating operations, with a maximum throughput rate of 120 metal units per hour, utilizing dry filters for particulate control, exhausting inside the building or through stack No. S-CO5;
- (2) All storage containers and mixing vessels in which coatings, thinners and/or other additives, and cleaning materials are stored or mixed;
- (3) All manual and automated equipment and containers used for conveying coatings, thinners and/or other additives, and cleaning materials; and
- (4) All storage containers and all manual and automated equipment and containers used for conveying waste materials generated by a coating operation,

as specified in Table 2 of 40 CFR 63, Subpart M in accordance with schedule in 40 CFR 63 Subpart M.

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

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

**D.4.6 Surface Coating of Miscellaneous Metal Parts and Products NESHAP Requirements [40 CFR Part 63, Subpart Mmmm] [326 IAC 20-80]**

Pursuant to CFR Part 63, Subpart Mmmm, the Permittee shall comply with the provisions of the Surface Coating of Miscellaneous Metal Parts and Products NESHAP, which are incorporated by reference as 326 IAC 20-80 for:

- (1) One (1) paint booth, identified as CO5, used for machine part maintenance coating operations, with a maximum throughput rate of 120 metal units per hour, utilizing dry filters for particulate control, exhausting inside the building or through stack No. S-CO5;
- (2) All storage containers and mixing vessels in which coatings, thinners and/or other additives, and cleaning materials are stored or mixed;
- (3) All manual and automated equipment and containers used for conveying coatings, thinners and/or other additives, and cleaning materials; and
- (4) All storage containers and all manual and automated equipment and containers used for conveying waste materials generated by a coating operation, as specified as follows.

**What This Subpart Covers**

**§ 63.3880 What is the purpose of this subpart?**

This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for miscellaneous metal parts and products surface coating facilities. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations.

**§ 63.3881 Am I subject to this subpart?**

(a) Miscellaneous metal parts and products include, but are not limited to, metal components of the following types of products as well as the products themselves: motor vehicle parts and accessories, bicycles and sporting goods, recreational vehicles, extruded aluminum structural components, railroad cars, heavy duty trucks, medical equipment, lawn and garden equipment, electronic equipment, magnet wire, steel drums, industrial machinery, metal pipes, and numerous other industrial, household, and consumer products. Except as provided in paragraph (c) of this section, the source category to which this subpart applies is the surface coating of any miscellaneous metal parts or products, as described in paragraph (a)(1) of this section, and it includes the subcategories listed in paragraphs (a)(2) through (6) of this section.

(1) Surface coating is the application of coating to a substrate using, for example, spray guns or dip tanks. When application of coating to a substrate occurs, then surface coating also includes associated activities, such as surface preparation, cleaning, mixing, and storage. However, these activities do not comprise surface coating if they are not directly related to the application of the coating. Coating application with handheld, non-refillable aerosol containers, touch-up markers, marking pens, or the application of paper film or plastic film which may be pre-coated with an adhesive by the manufacturer are not coating operations for the purposes of this subpart.

(2) The general use coating subcategory includes all surface coating operations that are not high performance, magnet wire, rubber-to-metal, or extreme performance fluoropolymer coating operations.

**(3) The high performance coating subcategory includes surface coating operations that are performed using coatings that meet the definition of high performance architectural coating or high temperature coating in §63.3981.**

**(4) The magnet wire coating subcategory includes surface coating operations that are performed using coatings that meet the definition of magnet wire coatings in §63.3981.**

**(5) The rubber-to-metal coatings subcategory includes surface coating operations that are performed using coatings that meet the definition of rubber-to-metal coatings in §63.3981.**

**(6) The extreme performance fluoropolymer coatings subcategory includes surface coating operations that are performed using coatings that meet the definition of extreme performance fluoropolymer coatings in §63.3981.**

**(b) You are subject to this subpart if you own or operate a new, reconstructed, or existing affected source, as defined in §63.3882, that uses 946 liters (250 gallons (gal)) per year, or more, of coatings that contain hazardous air pollutants (HAP) in the surface coating of miscellaneous metal parts and products defined in paragraph (a) of this section; and that is a major source, is located at a major source, or is part of a major source of emissions of HAP. A major source of HAP emissions is any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit any single HAP at a rate of 9.07 megagrams (Mg) (10 tons) or more per year or any combination of HAP at a rate of 22.68 Mg (25 tons) or more per year. You do not need to include coatings that meet the definition of non-HAP coating contained in §63.3981 in determining whether you use 946 liters (250 gal) per year, or more, of coatings in the surface coating of miscellaneous metal parts and products.**

**§ 63.3882 What parts of my plant does this subpart cover?**

**(a) This subpart applies to each new, reconstructed, and existing affected source within each of the four subcategories listed in §63.3881(a).**

**(b) The affected source is the collection of all of the items listed in paragraphs (b)(1) through (4) of this section that are used for surface coating of miscellaneous metal parts and products within each subcategory.**

**(1) All coating operations as defined in §63.3981;**

**(2) All storage containers and mixing vessels in which coatings, thinners and/or other additives, and cleaning materials are stored or mixed;**

**(3) All manual and automated equipment and containers used for conveying coatings, thinners and/or other additives, and cleaning materials; and**

**(4) All storage containers and all manual and automated equipment and containers used for conveying waste materials generated by a coating operation.**

**(e) An affected source is existing if it is not new or reconstructed.**

**§ 63.3883 When do I have to comply with this subpart?**

**The date by which you must comply with this subpart is called the compliance date. The compliance date for each type of affected source is specified in paragraphs (a) through (c) of this section. The compliance date begins the initial compliance period during which you conduct the initial compliance demonstration described in §§63.3940, 63.3950, and 63.3960.**

**(b) For an existing affected source, the compliance date is the date 3 years after January 2, 2004.**

**(d) You must meet the notification requirements in §63.3910 according to the dates specified in that section and in subpart A of this part. Some of the notifications must be submitted before the compliance dates described in paragraphs (a) through (c) of this section.**

## **Emission Limitations**

**§ 63.3890 What emission limits must I meet?**

**(b) For an existing affected source, you must limit organic HAP emissions to the atmosphere from the affected source to the applicable limit specified in paragraphs (b)(1) through (5) of this section, except as specified in paragraph (c) of this section, determined according to the requirements in §63.3941, §63.3951, or §63.3961.**

**(1) For each existing general use coating affected source, limit organic HAP emissions to no more than 0.31 kg (2.6 lb) organic HAP per liter (gal) coating solids used during each 12-month compliance period.**

**§ 63.3891 What are my options for meeting the emission limits?**

**You must include all coatings (as defined in §63.3981), thinners and/or other additives, and cleaning materials used in the affected source when determining whether the organic HAP emission rate is equal to or less than the applicable emission limit in §63.3890. To make this determination, you must use at least one of the three compliance options listed in paragraphs (a) through (c) of this section. You may apply any of the compliance options to an individual coating operation, or to multiple coating operations as a group, or to the entire affected source. You may use different compliance options for different coating operations, or at different times on the same coating operation. You may employ different compliance options when different coatings are applied to the same part, or when the same coating is applied to different parts. However, you may not use different compliance options at the same time on the same coating operation. If you switch between compliance options for any coating operation or group of coating operations, you must document this switch as required by §63.3930(c), and you must report it in the next semiannual compliance report required in §63.3920.**

**(a) *Compliant material option.* Demonstrate that the organic HAP content of each coating used in the coating operation(s) is less than or equal to the applicable emission limit in §63.3890, and that each thinner and/or other additive, and cleaning material used contains no organic HAP. You must meet all the requirements of §§63.3940, 63.3941, and 63.3942 to demonstrate compliance with the applicable emission limit using this option.**

**§ 63.3892 What operating limits must I meet?**

**(a) For any coating operation(s) on which you use the compliant material option or the emission rate without add-on controls option, you are not required to meet any operating limits.**

**§ 63.3893 What work practice standards must I meet?**

**(a) For any coating operation(s) on which you use the compliant material option or the emission rate without add-on controls option, you are not required to meet any work practice standards.**

**General Compliance Requirements**

**§ 63.3900 What are my general requirements for complying with this subpart?**

**(a) You must be in compliance with the emission limitations in this subpart as specified in paragraphs (a)(1) and (2) of this section.**

**(1) Any coating operation(s) for which you use the compliant material option or the emission rate without add-on controls option, as specified in §63.3891(a) and (b), must be in compliance with the applicable emission limit in §63.3890 at all times.**

**(b) You must always operate and maintain your affected source, including all air pollution control and monitoring equipment you use for purposes of complying with this subpart, according to the provisions in §63.6(e)(1)(i).**

**§ 63.3901 What parts of the General Provisions apply to me?**

**Table 2 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you.**

**Notifications, Reports, and Records**

**§ 63.3910 What notifications must I submit?**

**(a) *General.* You must submit the notifications in §§63.7(b) and (c), 63.8(f)(4), and 63.9(b) through (e) and (h) that apply to you by the dates specified in those sections, except as provided in paragraphs (b) and (c) of this section.**

**(b) Initial Notification.** You must submit the initial notification required by §63.9(b) for a new or reconstructed affected source no later than 120 days after initial startup or 120 days after January 2, 2004, whichever is later. For an existing affected source, you must submit the initial notification no later than 1 year after January 2, 2004. If you are using compliance with the Surface Coating of Automobiles and Light-Duty Trucks NESHAP (subpart IIII of this part) as provided for under §63.3881(d) to constitute compliance with this subpart for any or all of your metal parts coating operations, then you must include a statement to this effect in your initial notification, and no other notifications are required under this subpart in regard to those metal parts coating operations. If you are complying with another NESHAP that constitutes the predominant activity at your facility under §63.3881(e)(2) to constitute compliance with this subpart for your metal parts coating operations, then you must include a statement to this effect in your initial notification, and no other notifications are required under this subpart in regard to those metal parts coating operations.

**(c) Notification of compliance status.** You must submit the notification of compliance status required by §63.9(h) no later than 30 calendar days following the end of the initial compliance period described in §§63.3940, 63.3950, or 63.3960 that applies to your affected source. The notification of compliance status must contain the information specified in paragraphs (c)(1) through (11) of this section and in §63.9(h).

(1) Company name and address.

(2) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

(3) Date of the report and beginning and ending dates of the reporting period. The reporting period is the initial compliance period described in §§63.3940, 63.3950, or 63.3960 that applies to your affected source.

(4) Identification of the compliance option or options specified in §63.3891 that you used on each coating operation in the affected source during the initial compliance period.

(5) Statement of whether or not the affected source achieved the emission limitations for the initial compliance period.

(6) If you had a deviation, include the information in paragraphs (c)(6)(i) and (ii) of this section.

(i) A description and statement of the cause of the deviation.

(ii) If you failed to meet the applicable emission limit in §63.3890, include all the calculations you used to determine the kg (lb) of organic HAP emitted per liter (gal) coating solids used. You do not need to submit information provided by the materials' suppliers or manufacturers, or test reports.

(7) For each of the data items listed in paragraphs (c)(7)(i) through (iv) of this section that is required by the compliance option(s) you used to demonstrate compliance with the emission limit, include an example of how you determined the value, including calculations and supporting data. Supporting data may include a copy of the information provided by the supplier or manufacturer of the example coating or material, or a summary of the results of testing conducted according to §63.3941(a), (b), or (c). You do not need to submit copies of any test reports.

(i) Mass fraction of organic HAP for one coating, for one thinner and/or other additive, and for one cleaning material.

(ii) Volume fraction of coating solids for one coating.

(iii) Density for one coating, one thinner and/or other additive, and one leaning material, except that if you use the compliant material option, only the example coating density is required.

(iv) The amount of waste materials and the mass of organic HAP contained in the waste materials for which you are claiming an allowance in Equation 1 of §63.3951.

(8) The calculation of kg (lb) of organic HAP emitted per liter (gal) coating solids used for the compliance option(s) you used, as specified in paragraphs (c)(8)(i) through (iii) of this section.

(i) For the compliant material option, provide an example calculation of the organic HAP content for one coating, using Equation 2 of §63.3941.

**§ 63.3920 What reports must I submit?**

**(a) *Semiannual compliance reports.*** You must submit semiannual compliance reports for each affected source according to the requirements of paragraphs (a)(1) through (7) of this section. The semiannual compliance reporting requirements may be satisfied by reports required under other parts of the Clean Air Act (CAA), as specified in paragraph (a)(2) of this section.

**(1) *Dates.*** Unless the Administrator has approved or agreed to a different schedule for submission of reports under §63.10(a), you must prepare and submit each semiannual compliance report according to the dates specified in paragraphs (a)(1)(i) through (iv) of this section. Note that the information reported for each of the months in the reporting period will be based on the last 12 months of data prior to the date of each monthly calculation.

**(i)** The first semiannual compliance report must cover the first semiannual reporting period which begins the day after the end of the initial compliance period described in §63.3940, §63.3950, or §63.3960 that applies to your affected source and ends on June 30 or December 31, whichever date is the first date following the end of the initial compliance period.

**(ii)** Each subsequent semiannual compliance report must cover the subsequent semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

**(iii)** Each semiannual compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

**(iv)** For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the date specified in paragraph (a)(1)(iii) of this section.

**(2) *Inclusion with title V report.*** Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 40 CFR part 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a semiannual compliance report pursuant to this section along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the semiannual compliance report includes all required information concerning deviations from any emission limitation in this subpart, its submission will be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a semiannual compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permitting authority.

**(3) *General requirements.*** The semiannual compliance report must contain the information specified in paragraphs (a)(3)(i) through (vii) of this section, and the information specified in paragraphs (a)(4) through (7) and (c)(1) of this section that is applicable to your affected source.

**(i) Company name and address.**

**(ii) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.**

**(iii) Date of report and beginning and ending dates of the reporting period.** The reporting period is the 6-month period ending on June 30 or December 31. Note that the information reported for each of the 6 months in the reporting period will be based on the last 12 months of data prior to the date of each monthly calculation.

**(iv) Identification of the compliance option or options specified in §63.3891 that you used on each coating operation during the reporting period.** If you switched between compliance options during the reporting period, you must report the beginning and ending dates for each option you used.

**(4) *No deviations.*** If there were no deviations from the emission limitations in §§63.3890, 63.3892, and 63.3893 that apply to you, the semiannual compliance report must include a

statement that there were no deviations from the emission limitations during the reporting period. If you used the emission rate with add-on controls option and there were no periods during which the continuous parameter monitoring systems (CPMS) were out-of-control as specified in §63.8(c)(7), the semiannual compliance report must include a statement that there were no periods during which the CPMS were out-of-control during the reporting period.

**(5) Deviations: Compliant material option.** If you used the compliant material option and there was a deviation from the applicable organic HAP content requirements in §63.3890, the semiannual compliance report must contain the information in paragraphs (a)(5)(i) through (iv) of this section.

(i) Identification of each coating used that deviated from the applicable emission limit, and each thinner and/or other additive, and cleaning material used that contained organic HAP, and the dates and time periods each was used.

(ii) The calculation of the organic HAP content (using Equation 2 of §63.3941) for each coating identified in paragraph (a)(5)(i) of this section. You do not need to submit background data supporting this calculation ( e.g., information provided by coating suppliers or manufacturers, or test reports).

(iii) The determination of mass fraction of organic HAP for each thinner and/or other additive, and cleaning material identified in paragraph (a)(5)(i) of this section. You do not need to submit background data supporting this calculation ( e.g., information provided by material suppliers or manufacturers, or test reports).

(iv) A statement of the cause of each deviation.

#### § 63.3930 What records must I keep?

You must collect and keep records of the data and information specified in this section. Failure to collect and keep these records is a deviation from the applicable standard.

(a) A copy of each notification and report that you submitted to comply with this subpart, and the documentation supporting each notification and report. If you are using the predominant activity alternative under §63.3890(c), you must keep records of the data and calculations used to determine the predominant activity. If you are using the facility-specific emission limit alternative under §63.3890(c), you must keep records of the data used to calculate the facility-specific emission limit for the initial compliance demonstration. You must also keep records of any data used in each annual predominant activity determination and in the calculation of the facility-specific emission limit for each 12-month compliance period included in the semi-annual compliance reports.

(b) A current copy of information provided by materials suppliers or manufacturers, such as manufacturer's formulation data, or test data used to determine the mass fraction of organic HAP and density for each coating, thinner and/or other additive, and cleaning material, and the volume fraction of coating solids for each coating. If you conducted testing to determine mass fraction of organic HAP, density, or volume fraction of coating solids, you must keep a copy of the complete test report. If you use information provided to you by the manufacturer or supplier of the material that was based on testing, you must keep the summary sheet of results provided to you by the manufacturer or supplier. You are not required to obtain the test report or other supporting documentation from the manufacturer or supplier.

(c) For each compliance period, the records specified in paragraphs (c)(1) through (4) of this section.

(1) A record of the coating operations on which you used each compliance option and the time periods (beginning and ending dates and times) for each option you used.

(2) For the compliant material option, a record of the calculation of the organic HAP content for each coating, using Equation 2 of §63.3941.

(d) A record of the name and volume of each coating, thinner and/or other additive, and cleaning material used during each compliance period. If you are using the compliant material option for all coatings at the source, you may maintain purchase records for each material used rather than a record of the volume used.

- (e) A record of the mass fraction of organic HAP for each coating, thinner and/or other additive, and cleaning material used during each compliance period unless the material is tracked by weight.**
- (f) A record of the volume fraction of coating solids for each coating used during each compliance period.**
- (j) You must keep records of the date, time, and duration of each deviation.**

**§ 63.3931 In what form and for how long must I keep my records?**

- (a) Your records must be in a form suitable and readily available for expeditious review, according to §63.10(b)(1). Where appropriate, the records may be maintained as electronic spreadsheets or as a database.**
- (b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.**
- (c) You must keep each record on-site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record according to §63.10(b)(1). You may keep the records off-site for the remaining 3 years.**

**Compliance Requirements for the Compliant Material Option**

**§ 63.3940 By what date must I conduct the initial compliance demonstration?**

**You must complete the initial compliance demonstration for the initial compliance period according to the requirements in §63.3941. The initial compliance period begins on the applicable compliance date specified in §63.3883 and ends on the last day of the 12th month following the compliance date. If the compliance date occurs on any day other than the first day of a month, then the initial compliance period extends through that month plus the next 12 months. The initial compliance demonstration includes the calculations according to §63.3941 and supporting documentation showing that during the initial compliance period, you used no coating with an organic HAP content that exceeded the applicable emission limit in §63.3890, and that you used no thinners and/or other additives, or cleaning materials that contained organic HAP as determined according to §63.3941(a).**

**§ 63.3941 How do I demonstrate initial compliance with the emission limitations?**

**You may use the compliant material option for any individual coating operation, for any group of coating operations in the affected source, or for all the coating operations in the affected source. You must use either the emission rate without add-on controls option or the emission rate with add-on controls option for any coating operation in the affected source for which you do not use this option. To demonstrate initial compliance using the compliant material option, the coating operation or group of coating operations must use no coating with an organic HAP content that exceeds the applicable emission limits in §63.3890 and must use no thinner and/or other additive, or cleaning material that contains organic HAP as determined according to this section. Any coating operation for which you use the compliant material option is not required to meet the operating limits or work practice standards required in §§63.3892 and 63.3893, respectively. You must conduct a separate initial compliance demonstration for each general use, high performance, magnet wire, rubber-to-metal, and extreme performance fluoropolymer coating operation unless you are demonstrating compliance with a predominant activity or facility-specific emission limit as provided in §63.3890(c). If you are demonstrating compliance with a predominant activity or facility-specific emission limit as provided in §63.3890(c), you must demonstrate that all coating operations included in the predominant activity determination or calculation of the facility-specific emission limit comply with that limit. You must meet all the requirements of this section. Use the procedures in this section on each coating, thinner and/or other additive, and cleaning material in the condition it is in when it is received from its manufacturer or supplier and prior to any alteration. You do not need to redetermine the organic HAP content of coatings, thinners and/or other additives, and cleaning materials that are reclaimed on-site (or reclaimed off-site if you have documentation showing that you received back the exact same materials that were sent off-site) and reused in the coating operation for which you use the compliant material option, provided these**

materials in their condition as received were demonstrated to comply with the compliant material option.

**(a) Determine the mass fraction of organic HAP for each material used.** You must determine the mass fraction of organic HAP for each coating, thinner and/or other additive, and cleaning material used during the compliance period by using one of the options in paragraphs (a)(1) through (5) of this section.

**(1) Method 311 (appendix A to 40 CFR part 63).** You may use Method 311 for determining the mass fraction of organic HAP. Use the procedures specified in paragraphs (a)(1)(i) and (ii) of this section when performing a Method 311 test.

**(i)** Count each organic HAP that is measured to be present at 0.1 percent by mass or more for Occupational Safety and Health Administration (OSHA)-defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and at 1.0 percent by mass or more for other compounds. For example, if toluene (not an OSHA carcinogen) is measured to be 0.5 percent of the material by mass, you do not have to count it. Express the mass fraction of each organic HAP you count as a value truncated to four places after the decimal point ( e.g., 0.3791).

**(ii)** Calculate the total mass fraction of organic HAP in the test material by adding up the individual organic HAP mass fractions and truncating the result to three places after the decimal point ( e.g., 0.763).

**(2) Method 24 (appendix A to 40 CFR part 60).** For coatings, you may use Method 24 to determine the mass fraction of nonaqueous volatile matter and use that value as a substitute for mass fraction of organic HAP. For reactive adhesives in which some of the HAP react to form solids and are not emitted to the atmosphere, you may use the alternative method contained in appendix A to subpart PPPP of this part, rather than Method 24. You may use the volatile fraction that is emitted, as measured by the alternative method in appendix A to subpart PPPP of this part, as a substitute for the mass fraction of organic HAP.

**(3) Alternative method.** You may use an alternative test method for determining the mass fraction of organic HAP once the Administrator has approved it. You must follow the procedure in §63.7(f) to submit an alternative test method for approval.

**(4) Information from the supplier or manufacturer of the material.** You may rely on information other than that generated by the test methods specified in paragraphs (a)(1) through (3) of this section, such as manufacturer's formulation data, if it represents each organic HAP that is present at 0.1 percent by mass or more for OSHA-defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and at 1.0 percent by mass or more for other compounds. For example, if toluene (not an OSHA carcinogen) is 0.5 percent of the material by mass, you do not have to count it. For reactive adhesives in which some of the HAP react to form solids and are not emitted to the atmosphere, you may rely on manufacturer's data that expressly states the organic HAP or volatile matter mass fraction emitted. If there is a disagreement between such information and results of a test conducted according to paragraphs (a)(1) through (3) of this section, then the test method results will take precedence unless, after consultation, you demonstrate to the satisfaction of the enforcement agency that the formulation data are correct.

**(5) Solvent blends.** Solvent blends may be listed as single components for some materials in data provided by manufacturers or suppliers. Solvent blends may contain organic HAP which must be counted toward the total organic HAP mass fraction of the materials. When test data and manufacturer's data for solvent blends are not available, you may use the default values for the mass fraction of organic HAP in these solvent blends listed in Table 3 or 4 to this subpart. If you use the tables, you must use the values in Table 3 for all solvent blends that match Table 3 entries according to the instructions for Table 3, and you may use Table 4 only if the solvent blends in the materials you use do not match any of the solvent blends in Table 3 and you know only whether the blend is aliphatic or aromatic. However, if the results of a Method 311 (appendix A to 40 CFR part 63) test indicate higher values than those listed on Table 3 or 4 to this subpart, the Method 311 results will take precedence unless, after consultation, you demonstrate to the satisfaction of the enforcement agency that the formulation data are correct.

**(b) Determine the volume fraction of coating solids for each coating.** You must determine the volume fraction of coating solids (liters (gal) of coating solids per liter (gal) of coating) for each coating used during the compliance period by a test, by information provided by the supplier or the manufacturer of the material, or by calculation, as specified in paragraphs (b)(1) through (4) of this section. If test results obtained according to paragraph (b)(1) of this section do not agree with the information obtained under paragraph (b)(3) or (4) of this section, the test results will take precedence unless, after consultation, you demonstrate to the satisfaction of the enforcement agency that the formulation data are correct.

**(1) ASTM Method D2697–86 (Reapproved 1998) or ASTM Method D6093–97 (Reapproved 2003).** You may use ASTM Method D2697–86 (Reapproved 1998), “Standard Test Method for Volume Nonvolatile Matter in Clear or Pigmented Coatings” (incorporated by reference, see §63.14), or ASTM Method D6093–97 (Reapproved 2003), “Standard Test Method for Percent Volume Nonvolatile Matter in Clear or Pigmented Coatings Using a Helium Gas Pycnometer” (incorporated by reference, see §63.14), to determine the volume fraction of coating solids for each coating. Divide the nonvolatile volume percent obtained with the methods by 100 to calculate volume fraction of coating solids.

**(2) Alternative method.** You may use an alternative test method for determining the solids content of each coating once the Administrator has approved it. You must follow the procedure in §63.7(f) to submit an alternative test method for approval.

**(3) Information from the supplier or manufacturer of the material.** You may obtain the volume fraction of coating solids for each coating from the supplier or manufacturer.

**(4) Calculation of volume fraction of coating solids.** You may determine the volume fraction of coating solids using Equation 1 of this section:

$$V_s = 1 - \frac{m_{\text{volatiles}}}{D_{\text{avg}}} \quad (\text{Eq. 1})$$

Where:

$V_s$  = Volume fraction of coating solids, liters (gal) coating solids per liter (gal) coating.

$m_{\text{volatiles}}$  = Total volatile matter content of the coating, including HAP, volatile organic compounds (VOC), water, and exempt compounds, determined according to Method 24 in appendix A of 40 CFR part 60, grams volatile matter per liter coating.

$D_{\text{avg}}$  = Average density of volatile matter in the coating, grams volatile matter per liter volatile matter, determined from test results using ASTM Method D1475–98, “Standard Test Method for Density of Liquid Coatings, Inks, and Related Products” (incorporated by reference, see §63.14), information from the supplier or manufacturer of the material, or reference sources providing density or specific gravity data for pure materials. If there is disagreement between ASTM Method D1475–98 test results and other information sources, the test results will take precedence unless, after consultation you demonstrate to the satisfaction of the enforcement agency that the formulation data are correct.

**(c) Determine the density of each coating.** Determine the density of each coating used during the compliance period from test results using ASTM Method D1475–98, “Standard Test Method for Density of Liquid Coatings, Inks, and Related Products” (incorporated by reference, see §63.14), information from the supplier or manufacturer of the material, or specific gravity data for pure chemicals. If there is disagreement between ASTM Method D1475–98 test results and the supplier's or manufacturer's information, the test results will take precedence unless, after consultation you demonstrate to the satisfaction of the enforcement agency that the formulation data are correct.

**(d) Determine the organic HAP content of each coating.** Calculate the organic HAP content, kg (lb) of organic HAP emitted per liter (gal) coating solids used, of each coating used during the compliance period using Equation 2 of this section:

$$H_c = \frac{(D_c)(W_c)}{V_s} \quad (\text{Eq. 2})$$

Where:

$H_c$  = Organic HAP content of the coating, kg organic HAP emitted per liter (gal) coating solids used.

$D_c$  = Density of coating, kg coating per liter (gal) coating, determined according to paragraph (c) of this section.

$W_c$  = Mass fraction of organic HAP in the coating, kg organic HAP per kg coating, determined according to paragraph (a) of this section.

$V_s$  = Volume fraction of coating solids, liter (gal) coating solids per liter (gal) coating, determined according to paragraph (b) of this section.

(e) *Compliance demonstration.* The calculated organic HAP content for each coating used during the initial compliance period must be less than or equal to the applicable emission limit in §63.3890; and each thinner and/or other additive, and cleaning material used during the initial compliance period must contain no organic HAP, determined according to paragraph (a) of this section. You must keep all records required by §§63.3930 and 63.3931. As part of the notification of compliance status required in §63.3910, you must identify the coating operation(s) for which you used the compliant material option and submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the initial compliance period because you used no coatings for which the organic HAP content exceeded the applicable emission limit in §63.3890, and you used no thinners and/or other additives, or cleaning materials that contained organic HAP, determined according to the procedures in paragraph (a) of this section.

§ 63.3942 How do I demonstrate continuous compliance with the emission limitations?

(a) For each compliance period to demonstrate continuous compliance, you must use no coating for which the organic HAP content (determined using Equation 2 of §63.3941) exceeds the applicable emission limit in §63.3890, and use no thinner and/or other additive, or cleaning material that contains organic HAP, determined according to §63.3941(a). A compliance period consists of 12 months. Each month, after the end of the initial compliance period described in §63.3940, is the end of a compliance period consisting of that month and the preceding 11 months. If you are complying with a facility-specific emission limit under §63.3890(c), you must also perform the calculation using Equation 1 in §63.3890(c)(2) on a monthly basis using the data from the previous 12 months of operation.

(b) If you choose to comply with the emission limitations by using the compliant material option, the use of any coating, thinner and/or other additive, or cleaning material that does not meet the criteria specified in paragraph (a) of this section is a deviation from the emission limitations that must be reported as specified in §§63.3910(c)(6) and 63.3920(a)(5).

(c) As part of each semiannual compliance report required by §63.3920, you must identify the coating operation(s) for which you used the compliant material option. If there were no deviations from the applicable emission limit in §63.3890, submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the reporting period because you used no coatings for which the organic HAP content exceeded the applicable emission limit in §63.3890, and you used no thinner and/or other additive, or cleaning material that contained organic HAP, determined according to §63.3941(a).

(d) You must maintain records as specified in §§63.3930 and 63.3931.

#### Other Requirements and Information

§ 63.3980 Who implements and enforces this subpart?

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

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under subpart E of this part, the authorities contained in paragraph (c) of

this section are retained by the Administrator and are not transferred to the State, local, or tribal agency.

(c) The authorities that will not be delegated to State, local, or tribal agencies are listed in paragraphs (c)(1) through (4) of this section:

(1) Approval of alternatives to the requirements in §63.3881 through 3883 and §63.3890 through 3893.

(2) Approval of major alternatives to test methods under §63.7(e)(2)(ii) and (f) and as defined in §63.90.

(3) Approval of major alternatives to monitoring under §63.8(f) and as defined in §63.90.

(4) Approval of major alternatives to recordkeeping and reporting under §63.10(f) and as defined in §63.90.

**§ 63.3981 What definitions apply to this subpart?**

Terms used in this subpart are defined in the CAA, in 40 CFR 63.2, and in this section as follows:

**Additive** means a material that is added to a coating after purchase from a supplier (e.g., catalysts, activators, accelerators).

**Add-on control** means an air pollution control device, such as a thermal oxidizer or carbon adsorber, that reduces pollution in an air stream by destruction or removal before discharge to the atmosphere.

**Adhesive, adhesive coating** means any chemical substance that is applied for the purpose of bonding two surfaces together. Products used on humans and animals, adhesive tape, contact paper, or any other product with an adhesive incorporated onto or in an inert substrate shall not be considered adhesives under this subpart.

**Assembled on-road vehicle coating** means any coating operation in which coating is applied to the surface of some component or surface of a fully assembled motor vehicle or trailer intended for on-road use including, but not limited to, components or surfaces on automobiles and light-duty trucks that have been repaired after a collision or otherwise repainted, fleet delivery trucks, and motor homes and other recreational vehicles (including camping trailers and fifth wheels). Assembled on-road vehicle coating includes the concurrent coating of parts of the assembled on-road vehicle that are painted off-vehicle to protect systems, equipment, or to allow full coverage. Assembled on-road vehicle coating does not include surface coating operations that meet the applicability criteria of the automobiles and light-duty trucks NESHAP. Assembled on-road vehicle coating also does not include the use of adhesives, sealants, and caulks used in assembling on-road vehicles.

**Capture device** means a hood, enclosure, room, floor sweep, or other means of containing or collecting emissions and directing those emissions into an add-on air pollution control device.

**Capture efficiency or capture system efficiency** means the portion (expressed as a percentage) of the pollutants from an emission source that is delivered to an add-on control device.

**Capture system** means one or more capture devices intended to collect emissions generated by a coating operation in the use of coatings or cleaning materials, both at the point of application and at subsequent points where emissions from the coatings and cleaning materials occur, such as flashoff, drying, or curing. As used in this subpart, multiple capture devices that collect emissions generated by a coating operation are considered a single capture system.

**Cleaning material** means a solvent used to remove contaminants and other materials, such as dirt, grease, oil, and dried or wet coating (e.g., depainting or paint stripping), from a substrate before or after coating application or from equipment associated with a coating operation, such as spray booths, spray guns, racks, tanks, and hangers. Thus, it includes any cleaning material used on substrates or equipment or both.

**Coating** means a material applied to a substrate for decorative, protective, or functional purposes. Such materials include, but are not limited to, paints, sealants, liquid plastic coatings, caulks, inks, adhesives, and maskants. Decorative, protective, or functional materials that consist only of protective oils for metal, acids, bases, or any combination of

these substances, or paper film or plastic film which may be pre-coated with an adhesive by the film manufacturer, are not considered coatings for the purposes of this subpart. A liquid plastic coating means a coating made from fine particle-size polyvinyl chloride (PVC) in solution (also referred to as a plastisol).

**Coating operation** means equipment used to apply cleaning materials to a substrate to prepare it for coating application (surface preparation) or to remove dried coating; to apply coating to a substrate (coating application) and to dry or cure the coating after application; or to clean coating operation equipment (equipment cleaning). A single coating operation may include any combination of these types of equipment, but always includes at least the point at which a given quantity of coating or cleaning material is applied to a given part and all subsequent points in the affected source where organic HAP are emitted from the specific quantity of coating or cleaning material on the specific part. There may be multiple coating operations in an affected source. Coating application with handheld, non-refillable aerosol containers, touch-up markers, or marking pens is not a coating operation for the purposes of this subpart.

**Coatings solids** means the nonvolatile portion of the coating that makes up the dry film.

**Continuous parameter monitoring system (CPMS)** means the total equipment that may be required to meet the data acquisition and availability requirements of this subpart, used to sample, condition (if applicable), analyze, and provide a record of coating operation, or capture system, or add-on control device parameters.

**Controlled coating operation** means a coating operation from which some or all of the organic HAP emissions are routed through an emission capture system and add-on control device.

**Deviation** means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

- (1) Fails to meet any requirement or obligation established by this subpart including but not limited to, any emission limit or operating limit or work practice standard;
- (2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or
- (3) Fails to meet any emission limit, or operating limit, or work practice standard in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.

**Emission limitation** means the aggregate of all requirements associated with a compliance option including emission limit, operating limit, work practice standard, etc.

**Enclosure** means a structure that surrounds a source of emissions and captures and directs the emissions to an add-on control device.

**Exempt compound** means a specific compound that is not considered a VOC due to negligible photochemical reactivity. The exempt compounds are listed in 40 CFR 51.100(s).

**Extreme performance fluoropolymer coating** means coatings that are formulated systems based on fluoropolymer resins which often contain bonding matrix polymers dissolved in non-aqueous solvents as well as other ingredients. Extreme performance fluoropolymer coatings are typically used when one or more critical performance criteria are required including, but not limited to a nonstick low-energy surface, dry film lubrication, high resistance to chemical attack, extremely wide operating temperature, high electrical insulating properties, or that the surface comply with government (e.g., USDA, FDA) or third party specifications for health, safety, reliability, or performance. Once applied to a substrate, extreme performance fluoropolymer coatings undergo a curing process that typically requires high temperatures, a chemical reaction, or other specialized technology.

**Facility maintenance** means the routine repair or renovation (including the surface coating) of the tools, equipment, machinery, and structures that comprise the infrastructure of the affected facility and that are necessary for the facility to function in its intended capacity.

**General use coating** means any material that meets the definition of coating but does not meet the definition of high performance coating, rubber-to-metal coating, magnet wire coating, or extreme performance fluoropolymer coating as defined in this section.

***High performance architectural coating*** means any coating applied to architectural subsections which is required to meet the specifications of Architectural Aluminum Manufacturer's Association's publication number AAMA 605.2-2000.

***High performance coating*** means any coating that meets the definition of high performance architectural coating or high temperature coating in this section.

***High temperature coating*** means any coating applied to a substrate which during normal use must withstand temperatures of at least 538 degrees Celsius (1000 degrees Fahrenheit).

***Hobby shop*** means any surface coating operation, located at an affected source, that is used exclusively for personal, noncommercial purposes by the affected source's employees or assigned personnel.

***Magnet wire coatings***, commonly referred to as magnet wire enamels, are applied to a continuous strand of wire which will be used to make turns (windings) in electrical devices such as coils, transformers, or motors. Magnet wire coatings provide high dielectric strength and turn-to-turn conductor insulation. This allows the turns of an electrical device to be placed in close proximity to one another which leads to increased coil effectiveness and electrical efficiency.

***Magnet wire coating machine*** means equipment which applies and cures magnet wire coatings.

***Manufacturer's formulation data*** means data on a material (such as a coating) that are supplied by the material manufacturer based on knowledge of the ingredients used to manufacture that material, rather than based on testing of the material with the test methods specified in §63.3941. Manufacturer's formulation data may include, but are not limited to, information on density, organic HAP content, volatile organic matter content, and coating solids content.

***Mass fraction of organic HAP*** means the ratio of the mass of organic HAP to the mass of a material in which it is contained, expressed as kg of organic HAP per kg of material.

***Month*** means a calendar month or a pre-specified period of 28 days to 35 days to allow for flexibility in recordkeeping when data are based on a business accounting period.

***Non-HAP coating*** means, for the purposes of this subpart, a coating that contains no more than 0.1 percent by mass of any individual organic HAP that is an OSHA-defined carcinogen as specified in 29 CFR 1910.1200(d)(4) and no more than 1.0 percent by mass for any other individual HAP.

***Organic HAP content*** means the mass of organic HAP emitted per volume of coating solids used for a coating calculated using Equation 2 of §63.3941. The organic HAP content is determined for the coating in the condition it is in when received from its manufacturer or supplier and does not account for any alteration after receipt. For reactive adhesives in which some of the HAP react to form solids and are not emitted to the atmosphere, organic HAP content is the mass of organic HAP that is emitted, rather than the organic HAP content of the coating as it is received.

***Permanent total enclosure (PTE)*** means a permanently installed enclosure that meets the criteria of Method 204 of appendix M, 40 CFR part 51, for a PTE and that directs all the exhaust gases from the enclosure to an add-on control device.

***Personal watercraft*** means a vessel (boat) which uses an inboard motor powering a water jet pump as its primary source of motive power and which is designed to be operated by a person or persons sitting, standing, or kneeling on the vessel, rather than in the conventional manner of sitting or standing inside the vessel.

***Protective oil*** means an organic material that is applied to metal for the purpose of providing lubrication or protection from corrosion without forming a solid film. This definition of protective oil includes, but is not limited to, lubricating oils, evaporative oils (including those that evaporate completely), and extrusion oils. Protective oils used on miscellaneous metal parts and products include magnet wire lubricants and soft temporary protective coatings that are removed prior to installation or further assembly of a part or component.

***Reactive adhesive*** means adhesive systems composed, in part, of volatile monomers that react during the adhesive curing reaction, and, as a result, do not evolve from the film during use. These volatile components instead become integral parts of the adhesive

through chemical reaction. At least 70 percent of the liquid components of the system, excluding water, react during the process.

**Research or laboratory facility** means a facility whose primary purpose is for research and development of new processes and products, that is conducted under the close supervision of technically trained personnel, and is not engaged in the manufacture of final or intermediate products for commercial purposes, except in a *de minimis* manner.

**Responsible official** means responsible official as defined in 40 CFR 70.2.

**Rubber-to-metal coatings** are coatings that contain heat-activated polymer systems in either solvent or water that, when applied to metal substrates, dry to a non-tacky surface and react chemically with the rubber and metal during a vulcanization process.

**Startup, initial** means the first time equipment is brought online in a facility.

**Surface preparation** means use of a cleaning material on a portion of or all of a substrate. This includes use of a cleaning material to remove dried coating, which is sometimes called *depainting*.

**Temporary total enclosure** means an enclosure constructed for the purpose of measuring the capture efficiency of pollutants emitted from a given source as defined in Method 204 of appendix M, 40 CFR part 51.

**Thinner** means an organic solvent that is added to a coating after the coating is received from the supplier.

**Total volatile hydrocarbon (TVH)** means the total amount of nonaqueous volatile organic matter determined according to Methods 204 and 204A through 204F of appendix M to 40 CFR part 51 and substituting the term TVH each place in the methods where the term VOC is used. The TVH includes both VOC and non-VOC.

**Uncontrolled coating operation** means a coating operation from which none of the organic HAP emissions are routed through an emission capture system and add-on control device.

**Volatile organic compound (VOC)** means any compound defined as VOC in 40 CFR 51.100(s).

**Volume fraction of coating solids** means the ratio of the volume of coating solids (also known as the volume of nonvolatiles) to the volume of a coating in which it is contained; liters (gal) of coating solids per liter (gal) of coating.

**Wastewater** means water that is generated in a coating operation and is collected, stored, or treated prior to being discarded or discharged.

Table 2 to Subpart M of Part 63—Applicability of General Provisions to Subpart M of Part 63

You must comply with the applicable General Provisions requirements according to the following table:

| Citation               | Subject  | Applicable to Subpart M | Explanation   |
|------------------------|--|-------------------------|---|
| § 63.1(a)(1)-(14)..... | General Applicability.   | Yes.....                |   |
| § 63.1(b)(1)-(3).....  | Initial Applicability Determination.                             | Yes.....                | Applicability to subpart M is also specified in §63.3881. |
| § 63.1(c)(1).....      | Applicability After Standard Established.                        | Yes.....                |   |
| § 63.1(c)(2)-(3).....  | Applicability of Permit Program for Area Sources.                | No.....                 | Area sources are not subject to subpart M.                |
| § 63.1(c)(4)-(5).....  | Extensions and Notifications.                                    | Yes.....                |   |
| § 63.1(e).....         | Applicability of Permit Program Before Relevant Standard is Set. | Yes.....                |   |

| Citation              | Subject  | Applicable to Subpart MMMM | Explanation   |
|-----------------------|--|----------------------------|---|
| § 63.2.....           | Definitions.....   | Yes.....                   | Additional definitions are specified in § 63.3981.  |
| § 63.1(a)-(c).....    | Units and Abbreviations.   | Yes.....                   |   |
| § 63.4(a)(1)-(5)..... | Prohibited Activities.   | Yes.....                   |   |
| § 63.4(b)-(c).....    | Circumvention/<br>Severability.  | Yes.....                   |   |
| § 63.5(a).....        | Construction/<br>Reconstruction.   | Yes.....                   |   |
| § 63.5(b)(1)-(6)..... | Requirements for Existing Newly Constructed, and Reconstructed Sources.  | Yes.....                   |   |
| § 63.5(d).....        | Application for Approval of Construction/<br>Reconstruction.             | Yes.....                   |   |
| § 63.5(e).....        | Approval of Construction/<br>Reconstruction.                             | Yes.....                   |   |
| § 63.5(f).....        | Approval of Construction/<br>Reconstruction Based on Prior State Review. | Yes.....                   |   |
| § 63.6(a).....        | Compliance With Standards and Maintenance Requirements - Applicability.  | Yes.....                   |   |
| § 63.6(b)(1)-(7)..... | Compliance Dates for New and Reconstructed Sources.                      | Yes.....                   | Section 63.3883 specifies the compliance dates.   |
| § 63.6(c)(1)-(5)..... | Compliance Dates for Existing Sources.                                   | Yes.....                   | Section 63.3883 specifies the compliance dates.   |
| § 63.6(e)(1)-(2)..... | Operation and Maintenance.   | Yes.....                   |   |
| § 63.6(e)(3).....     | Startup, Shutdown, and Malfunction Plan.                                 | Yes.....                   | Only sources using an add-on control device to comply with the standard must complete startup, shutdown, and malfunction plans. |
| § 63.6(f)(1).....     | Compliance Except During Startup, Shutdown, and Malfunction.             | Yes.....                   | Applies only to sources using an add-on control device to comply with the standard.   |
| § 63.6(f)(2)-(3)..... | Methods for Determining Compliance..                                     | Yes.....                   |   |
| § 63.6(g)(1)-(3)..... | Use of an Alternative Standard.  | Yes.....                   |   |

| Citation               | Subject   | Applicable to Subpart Mmmm | Explanation   |
|------------------------|---|----------------------------|---|
| § 63.6(h).....         | Compliance With Opacity/Visible Emission Standards.   | No.....                    | Subpart Mmmm does not establish opacity standards and does not require continuous opacity monitoring systems (COMS).  |
| § 63.6(i)(1)-(16)..... | Extension of Compliance.  | Yes.....                   |   |
| § 63.6(j).....         | Presidential Compliance Exemption.  | Yes.....                   |   |
| § 63.7(a)(1).....      | Performance Test Requirements - Applicability.  | Yes.....                   | Applies to all affected sources. Additional requirements for performance testing are specified in §§ 63.3964, 63.3965, and 63.3966.   |
| § 63.7(a)(2).....      | Performance Test Requirements - Dates.  | Yes.....                   | Applies only to performance tests for capture system and control device efficiency at sources using these to comply with the standard. Section 63.3960 specifies the schedule for performance test requirements that are earlier than those specified in §63.7(a)(2). |
| § 63.7(a)(3).....      | Performance Tests Required By the Administrator.  | Yes.....                   |   |
| § 63.7(b)-(e).....     | Performance Test Requirements - Notification, Quality Assurance, Facilities Necessary for Safe Testing, Conditions During Test. | Yes.....                   | Applies only to performance tests for capture system and add-on control device efficiency at sources using these to comply with the standard.   |
| § 63.7(f).....         | Performance Test Requirements - Use of Alternative Test Method.   | Yes.....                   | Applies to all test methods except those used to determine capture system efficiency.   |
| § 63.7(g)-(h).....     | Performance Test Requirements - Data Analysis, Recordkeeping, Reporting, Waiver of Test.  | Yes.....                   | Applies only to performance tests for capture system and add-on control device efficiency at sources using these to comply with the standard.   |

| Citation              | Subject  | Applicable to Subpart Mmmm | Explanation  |
|-----------------------|--|----------------------------|--|
| § 63.8(a)(1)-(3)..... | Monitoring Requirements - Applicability.                       | Yes.....                   | Applies only to monitoring of capture system and add-on control device efficiency at sources using these to comply with the standard. Additional requirements for monitoring are specified in § 63.3968.                     |
| § 63.8(a)(4).....     | Additional Monitoring Requirements.                            | No.....                    | Subpart Mmmm does not have monitoring requirements for flares.   |
| § 63.8(b).....        | Conduct of Monitoring.   | Yes.....                   |  |
| § 63.8(c)(1)-(3)..... | Continuous Monitoring Systems (CMS) Operation and Maintenance. | Yes.....                   | Applies only to monitoring of capture system and add-on control device efficiency at sources using these to comply with the standard. Additional requirements for CMS operations and maintenance are specified in § 63.3968. |
| § 63.8(c)(4).....     | CMS.....   | No.....                    | § 63.3968 specifies the requirements for the operation of CMS for capture systems and add-on control devices at sources using these to comply.   |
| § 63.8(c)(5).....     | COMS.....  | No.....                    | Subpart Mmmm does not have opacity or visible emission standards.  |
| § 63.8(c)(6).....     | CMS Requirements.....  | No.....                    | Section 63.3968 specifies the requirements for monitoring systems for capture systems and add-on control devices at sources using these to comply.   |
| § 63.8(c)(7).....     | CMS Out-of-Control Periods.                                    | Yes.....                   |  |
| § 63.8(c)(8).....     | CMS Out-of-Control Periods and Reporting.                      | No.....                    | § 63.3920 requires reporting of CMS out-of-control periods.  |

| Citation                   | Subject   | Applicable to Subpart M MMM | Explanation  |
|----------------------------|---|-----------------------------|--|
| § 63.8(d)-(e).....         | Quality Control Program and CMS Performance Evaluation.                       | No.....                     | Subpart M MMM does not require the use of continuous emissions monitoring systems.   |
| § 63.8(f)(1)-(5).....      | Use of an Alternative Monitoring Method.                                      | Yes.....                    |  |
| § 63.8(f)(6).....          | Alternative to Relative Accuracy Test.  | No.....                     | Subpart M MMM does not require the use of continuous emissions monitoring systems.   |
| § 63.8(g)(1)-(5).....      | Data Reduction.....   | No.....                     | Sections 63.3967 and 63.3968 specify monitoring data reduction.  |
| § 63.9(a)-(d).....         | Notification Requirements.  | Yes.....                    |  |
| § 63.9(e).....             | Notification of Performance Test.   | Yes.....                    | Applies only to capture system and add-on control device performance tests at sources using these to comply with the standard.     |
| § 63.9(f).....             | Notification of Visible Emissions/Opacity Test.                               | No.....                     | Subpart M MMM does not have opacity or visible emissions standards.  |
| § 63.9(g)(1)-(3).....      | Additional Notifications When Using CMS.                                      | No.....                     | Subpart M MMM does not require the use of continuous emissions monitoring systems.   |
| § 63.9(h).....             | Notification of Compliance Status.  | Yes.....                    | Section 63.3910 specifies the dates for submitting the notification of compliance status.  |
| § 63.9(i).....             | Adjustment of Submittal Deadlines.  | Yes.....                    |  |
| § 63.9(j).....             | Change in Previous Information.   | Yes.....                    |  |
| § 63.10(a).....            | Recordkeeping/Reporting - Applicability and General Information.              | Yes.....                    |  |
| § 63.10(b)(1).....         | General Recordkeeping Requirements.   | Yes.....                    | Additional requirements are specified in §§ 63.3930 and 63.3931.   |
| § 63.10(b)(2) (i)-(v)..... | Recordkeeping Relevant to Startup, Shutdown, and Malfunction Periods and CMS. | Yes.....                    | Requirements for startup, shutdown, and malfunction records only apply to add-on control devices used to comply with the standard. |

| Citation                    | Subject  | Applicable to Subpart Mmmm | Explanation  |
|-----------------------------|--|----------------------------|--|
| § 63.10(b)(2) (vi)-(xi).... | .....  | Yes.....                   |  |
| § 63.10(b)(2) (xii).....    | Records.....   | Yes.....                   |  |
| § 63.10(b)(2) (xiii).....   | .....  | No.....                    | Subpart Mmmm does not require the use of continuous emissions monitoring systems.          |
| § 63.10(b)(2) (xiv).....    | .....  | Yes.....                   |  |
| § 63.10(b)(3).....          | Recordkeeping Requirements for Applicability Determinations. | Yes.....                   |  |
| § 63.10(c) (1)-(6).....     | Additional Recordkeeping Requirements for Sources with CMS.  | Yes.....                   |  |
| § 63.10(c) (7)-(8).....     | .....  | No.....                    | The same records are required in §63.3920(a)(7).   |
| § 63.10(c) (9)-(15).....    | .....  | Yes.....                   |  |
| § 63.10(d)(1).....          | General Reporting Requirements.                              | Yes.....                   | Additional requirements are specified in § 63.3920.  |
| § 63.10(d)(2).....          | Report of Performance Test Results.                          | Yes.....                   | Additional requirements are specified in §63.3920(b).                                      |
| § 63.10(d)(3).....          | Reporting Opacity or Visible Emissions Observations.         | No.....                    | Subpart Mmmm does not require opacity or visible emissions observations.                   |
| § 63.10(d)(4).....          | Progress Reports for Sources With Compliance Extensions.     | Yes.....                   |  |
| § 63.10(d)(5).....          | Startup, Shutdown, and Malfunction Reports.                  | Yes.....                   | Applies only to add-on control devices at sources using these to comply with the standard. |
| § 63.10(e) (1)-(2).....     | Additional CMS Reports                                       | No.....                    | Subpart Mmmm does not require the use of continuous emissions monitoring systems.          |
| § 63.10(e) (3).....         | Excess Emissions/CMS Performance Reports.                    | No.....                    | Section 63.3920 (b) specifies the contents of periodic compliance reports.                 |
| § 63.10(e) (4).....         | COMS Data Reports.....                                       | No.....                    | Subpart Mmmm does not specify requirements for opacity or COMS.                            |
| § 63.10(f).....             | Recordkeeping/Reporting Waiver.                              | Yes.....                   |  |

| Citation     | Subject                                      | Applicable to Subpart MMMM | Explanation   |
|--------------|--|----------------------------|---|
| § 63.11..... | Control Device Requirements/Flares.          | No.....                    | Subpart MMMM does not specify use of flares for compliance. |
| § 63.12..... | State Authority and Delegations.             | Yes.....                   |   |
| § 63.13..... | Addresses.....                               | Yes.....                   |   |
| § 63.14..... | Incorporation by Reference.                  | Yes.....                   |   |
| § 63.15..... | Availability of Information/Confidentiality. | Yes.....                   |   |

**Table 3 to Subpart MMMM of Part 63—Default Organic HAP Mass Fraction for Solvents and Solvent Blends**

You may use the mass fraction values in the following table for solvent blends for which you do not have test data or manufacturer's formulation data and which match either the solvent blend name or the chemical abstract series (CAS) number. If a solvent blend matches both the name and CAS number for an entry, that entry's organic HAP mass fraction must be used for that solvent blend. Otherwise, use the organic HAP mass fraction for the entry matching either the solvent blend name or CAS number, or use the organic HAP mass fraction from table 4 to this subpart if neither the name or CAS number match.

| Solvent/solvent blend             | CAS. No.   | Average organic HAP mass fraction | Typical organic HAP, percent by mass |
|-----------------------------------|------------|-----------------------------------|--------------------------------------|
| 1. Toluene                        | 108-88-3   | 1.0                               | Toluene.                             |
| 2. Xylene(s)                      | 1330-20-7  | 1.0                               | Xylenes, ethylbenzene.               |
| 3. Hexane                         | 110-54-3   | 0.5                               | n-hexane.                            |
| 4. n-Hexane                       | 110-54-3   | 1.0                               | n-hexane.                            |
| 5. Ethylbenzene                   | 100-41-4   | 1.0                               | Ethylbenzene.                        |
| 6. Aliphatic 140                  |            | 0                                 | None.                                |
| 7. Aromatic 100                   |            | 0.02                              | 1% xylene, 1% cumene.                |
| 8. Aromatic 150                   |            | 0.09                              | Naphthalene.                         |
| 9. Aromatic naphtha               | 64742-95-6 | 0.02                              | 1% xylene, 1% cumene.                |
| 10. Aromatic solvent              | 64742-94-5 | 0.1                               | Naphthalene.                         |
| 11. Exempt mineral spirits        | 8032-32-4  | 0                                 | None.                                |
| 12. Ligroines (VM & P)            | 8032-32-4  | 0                                 | None.                                |
| 13. Lactol spirits                | 64742-89-6 | 0.15                              | Toluene.                             |
| 14. Low aromatic white spirit     | 64742-82-1 | 0                                 | None.                                |
| 15. Mineral spirits               | 64742-88-7 | 0.01                              | Xylenes.                             |
| 16. Hydrotreated naphtha          | 64742-48-9 | 0                                 | None.                                |
| 17. Hydrotreated light distillate | 64742-47-8 | 0.001                             | Toluene.                             |
| 18. Stoddard solvent              | 8052-41-3  | 0.01                              | Xylenes.                             |
| 19. Super high-flash naphtha      | 64742-95-6 | 0.05                              | Xylenes.                             |
| 20. Varsol <sup>®</sup> solvent   | 8052-49-3  | 0.01                              | 0.5% xylenes, 0.5% ethylbenzene.     |
| 21. VM & P naphtha                | 64742-89-8 | 0.06                              | 3% toluene, 3% xylene.               |
| 22. Petroleum distillate mixture  | 68477-31-6 | 0.08                              | 4% naphthalene, 4% biphenyl.         |

**Table 4 to Subpart MMMM of Part 63—Default Organic HAP Mass Fraction for Petroleum Solvent Groups<sup>a</sup>**

You may use the mass fraction values in the following table for solvent blends for which you do not have test data or manufacturer's formulation data.

| Solvent type           | Average organic HAP mass fraction | Typical organic HAP, percent by mass        |
|------------------------|-----------------------------------|---|
| Aliphatic <sup>b</sup> | 0.03                              | 1% Xylene, 1% Toluene, and 1% Ethylbenzene. |
| Aromatic <sup>c</sup>  | 0.06                              | 4% Xylene, 1% Toluene, and 1% Ethylbenzene. |

<sup>a</sup>Use this table only if the solvent blend does not match any of the solvent blends in Table 3 to this subpart by either solvent blend name or CAS number and you only know whether the blend is aliphatic or aromatic.

<sup>b</sup>Mineral Spirits 135, Mineral Spirits 150 EC, Naphtha, Mixed Hydrocarbon, Aliphatic Hydrocarbon, Aliphatic Naphtha, Naphthol Spirits, Petroleum Spirits, Petroleum Oil, Petroleum Naphtha, Solvent Naphtha, Solvent Blend.

<sup>c</sup>Medium-flash Naphtha, High-flash Naphtha, Aromatic Naphtha, Light Aromatic Naphtha, Light Aromatic Hydrocarbons, Aromatic Hydrocarbons, Light Aromatic Solvent.

**D.4.7 One Time Deadlines Relating to National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products [40 CFR Part 63, Subpart MMMM]**

The Permittee shall comply with the following requirements by the dates listed:

| Requirement                        | Rule Cite         | Affected Facility  | Deadline   |
|------------------------------------|-------------------|--|--|
| Initial Notification               | 40 CFR 63.3910(b) | One (1) paint booth, identified as CO5, all storage containers and mixing vessels in which coatings, thinners and/or other additives, and cleaning materials are stored or mixed, all manual and automated equipment and containers used for conveying coatings, thinners and/or other additives, and cleaning materials, and all storage containers and all manual and automated equipment and containers used for conveying waste materials generated by a coating operation | January 2, 2005.   |
| Notification of compliance status. | 40 CFR 63.3910(c) | Same as above  | No later than 30 calendar days following the end of the initial compliance period described in §63.3940. |

| Requirement   | Rule Cite            | Affected Facility | Deadline  |
|---|----------------------|-------------------|---|
| First Semi-annual Compliance Report   | 40 CFR 63.3920(a)(1) | Same as above     | July 31, 2008   |
| Initial compliance demonstration for the initial compliance period according to the requirements of §63.3941. | 40 CFR 63.3940       | Same as above     | Initial compliance period is from January 2, 2007 through January 31, 2008. |

18. New sections E.1 through E.2 have been added to the Part 70 permit to include the requirements of the NESHAPs, 40 CFR 63, Subpart EEEEE and Subpart EEEE as follows:

**SECTION E.1 FACILITY OPERATION CONDITIONS**

|  |  |
|--|--|
| <b>Facility Description [326 IAC 2-7-5(15)]:</b> |  |
| (b)  | <p>One (1) gray and ductile iron foundry line, constructed in 1988, identified as Plant 1, consisting of the following:</p> <p>(1) Melting Operations originally constructed in 1988 and modified in 2004, consisting of:</p> <p>(A) One (1) melting system, identified as P8, with a maximum capacity of 20 tons of metal per hour, consisting of three (3) electric induction furnaces, each with a melting capacity of 10 tons per hour, utilizing two (2) cartridge collectors for particulate control, identified as DC-3A and DC-3B, exhausting to a common stack ID No. 3;</p> <p>Note: The maximum throughput of metal for the melting system is limited to 20 tons per hour by the maximum throughput from the charge handling system of 20 tons of metal per hour.</p> <p>(C) One (1) holding system consisting of the following equipment:</p> <p>(1) Two (2) electric holding furnaces, identified as P9, each with a holding capacity of 50 tons and a total maximum throughput capacity of 100 tons of metal per hour;</p> <p>(2) Two (2) natural gas-fired metal treatment ladle heaters constructed in 2004, each with a rated capacity of 1.0 MMBtu/hr.</p> <p>(3) Two (2) natural gas-fired pouring ladle heaters (P10) constructed in 2004, each with a rated capacity of 0.4 MMBtu/hr.</p> |
| (c)  | <p>Plant 1, Casting Line 2, constructed in 2004, with a capacity of 15 tons of metal per hour and 70 tons of sand per hour consisting of the following equipment:</p> <p>(1) One (1) pouring station identified as P13B controlled by dust collector DC3B, exhausting to stack 3B.</p> <p>(2) One (1) cooling line identified as P14B, controlled by baghouse BH6200, exhausting to stack 6200.</p>  |

- (d) Plant 2, ductile iron foundry line, constructed in 1997, consisting of the following:**
- (1) One (1) melting and pouring system, identified as ID # 1110 and 2000, respectively, with a maximum capacity of 10 tons of metal per hour, utilizing a baghouse (ID # BH6010) for particulate control, exhausting to stack ID # 6010, consisting of the following equipment:**
    - (A) Two (2) electric induction furnaces, each with a maximum capacity of 10 tons of metal per hour;**
    - (B) One (1) electric holding furnace (uncontrolled);**
    - (C) Two (2) natural gas-fired ladle heaters, identified as ID # 6600 and 6610, each with a maximum heat input rate of 2 MMBtu per hour;**

**Note: The maximum throughput of metal for the melting and pouring system is limited to 10 tons per hour by the maximum throughput from the charge handling system of 10 tons of metal per hour and the power control systems at the plant.**
  - (2) One (1) mold machine, identified as ID #2010, with a maximum capacity of 10 tons of metal per hour and 70 tons of sand per hour, utilizing one (1) baghouse (ID # BH6010) for particulate control, exhausting to stack ID# 6010; and**
  - (3) One (1) casting cooling and conveyor system, identified as #2015 and 2020, respectively, with a maximum capacity of 10 tons of metal per hour and 70 tons of sand per hour, utilizing two (2) baghouses (ID # BH6020 and 6030) for particulate control exhausting to stack ID#s 6020 and 6030A and 6030B.**
- Under the Iron and Steel Foundries NESHAP (40 CFR 63, Subpart EEEEE) the above listed facilities are considered an existing affected source.**
- (The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)**

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

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

- (a) Pursuant to 40 CFR 63.7760, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1-1 for the above listed facilities and the fugitive emissions from the foundry operations as specified in Table 1 of 40 CFR 63, Subpart EEEEE in accordance with schedule in 40 CFR 63 Subpart EEEEE.**
- (b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports to:**

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

**E.1.2 National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Requirements [40 CFR Part 63, Subpart EEEEE] [326 IAC 20-92]**

---

Pursuant to CFR Part 63, Subpart EEEEE, the Permittee shall comply with the provisions of the National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries, which are incorporated by reference as 326 IAC 20-92 for the above listed facilities and the fugitive emissions from the foundry operations as specified as follows.

**What this Subpart Covers**

**§ 63.7680 What is the purpose of this subpart?**

This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for iron and steel foundries. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emissions limitations, work practice standards, and operation and maintenance requirements in this subpart.

**§ 63.7681 Am I subject to this subpart?**

You are subject to this subpart if you own or operate an iron and steel foundry that is (or is part of) a major source of hazardous air pollutant (HAP) emissions. Your iron and steel foundry is a major source of HAP for purposes of this subpart if it emits or has the potential to emit any single HAP at a rate of 10 tons or more per year or any combination of HAP at a rate of 25 tons or more per year or if it is located at a facility that emits or has the potential to emit any single HAP at a rate of 10 tons or more per year or any combination of HAP at a rate of 25 tons or more per year.

**§ 63.7682 What parts of my foundry does this subpart cover?**

- (a) The affected source is each new or existing iron and steel foundry.
- (b) This subpart covers emissions from metal melting furnaces, scrap preheaters, pouring areas, pouring stations, automated conveyor and pallet cooling lines, automated shakeout lines, and mold and core making lines. This subpart also covers fugitive emissions from foundry operations.
- (c) An affected source is existing if you commenced construction or reconstruction of the affected source before December 23, 2002.
- (d) An affected source is new if you commenced construction or reconstruction of the affected source on or after December 23, 2002. An affected source is reconstructed if it meets the definition of "reconstruction" in §63.2.

**§ 63.7683 When do I have to comply with this subpart?**

- (a) Except as specified in paragraph (b) of this section, if you have an existing affected source, you must comply with each emissions limitation, work practice standard, and operation and maintenance requirement in this subpart that applies to you no later than April 23, 2007. Major source status for existing affected sources must be determined no later than April 23, 2007.
- (b) If you have an existing affected source, you must comply with the work practice standards in §63.7700(b) or (c), as applicable, no later than April 22, 2005.
- (f) You must meet the notification and schedule requirements in §63.7750. Note that several of these notifications must be submitted before the compliance date for your affected source.

## **Emissions Limitations**

### **§ 63.7690 What emissions limitations must I meet?**

**(a) You must meet each emissions limit or standard in paragraphs (a)(1) through (11) of this section that applies to you.**

**(1) For each electric arc metal melting furnace, electric induction metal melting furnace, or scrap preheater at an existing iron and steel foundry, you must not discharge emissions through a conveyance to the atmosphere that exceed either the limit for particulate matter (PM) in paragraph (a)(1)(i) of this section or, alternatively the limit for total metal HAP in paragraph (a)(1)(ii) of this section:**

**(i) 0.005 grains of PM per dry standard cubic foot (gr/dscf)**

**(5) For each pouring station at an existing iron and steel foundry, you must not discharge emissions through a conveyance to the atmosphere that exceed either the limit for PM in paragraph (a)(5)(i) of this section or, alternatively the limit for total metal HAP in paragraph (a)(5)(ii) of this section:**

**(i) 0.010 gr/dscf of PM**

**(7) For each building or structure housing any emissions source at the iron and steel foundry, you must not discharge any fugitive emissions to the atmosphere that exhibit opacity greater than 20 percent (6-minute average), except for one 6-minute average per hour that does not exceed 27 percent opacity.**

## **Work Practice Standards**

### **§ 63.7700 What work practice standards must I meet?**

**(a) For each segregated scrap storage area, bin or pile, you must either comply with the certification requirements in paragraph (b) of this section, or prepare and implement a plan for the selection and inspection of scrap according to the requirements in paragraph (c) of this section. You may have certain scrap subject to paragraph (b) of this section and other scrap subject to paragraph (c) of this section at your facility provided the scrap remains segregated until charge make-up.**

**(b) You must prepare and operate at all times according to a written certification that the foundry purchases and uses only metal ingots, pig iron, slitter, or other materials that do not include post-consumer automotive body scrap, post-consumer engine blocks, post-consumer oil filters, oily turnings, lead components, mercury switches, plastics, or free organic liquids. For the purpose of this paragraph (b), "free organic liquids" is defined as material that fails the paint filter test by EPA Method 9095A, "Paint Filter Liquids Test" (Revision 1, December 1996), as published in EPA Publication SW-846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (incorporated by reference—see §63.14). Any post-consumer engine blocks, post-consumer oil filters, or oily turnings that are processed and/or cleaned to the extent practicable such that the materials do not include lead components, mercury switches, plastics, or free organic liquids can be included in this certification.**

## **Operation and Maintenance Requirements**

### **§ 63.7710 What are my operation and maintenance requirements?**

**(a) As required by §63.6(e)(1)(i), you must always operate and maintain your iron and steel foundry, including air pollution control and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by this subpart.**

**(b) You must prepare and operate at all times according to a written operation and maintenance plan for each capture and collection system and control device for an emissions source subject to an emissions limit in §63.7690(a). Your operation and maintenance plan also must include procedures for igniting gases from mold vents in pouring areas and pouring stations that use a sand mold system. This operation and maintenance plan is subject to approval by the Administrator. Each plan must contain the elements described in paragraphs (b)(1) through (6) of this section.**

**(1) Monthly inspections of the equipment that is important to the performance of the total capture system (i.e., pressure sensors, dampers, and damper switches). This inspection must include observations of the physical appearance of the equipment (e.g., presence of holes in the ductwork or hoods, flow constrictions caused by dents or accumulated dust in the ductwork, and fan erosion). The operation and maintenance plan must also include requirements to repair the defect or deficiency as soon as practicable.**

**(3) Preventative maintenance plan for each control device, including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.**

**(4) A site-specific monitoring plan for each bag leak detection system. For each bag leak detection system that operates on the triboelectric effect, the monitoring plan must be consistent with the recommendations contained in the U.S. Environmental Protection Agency guidance document "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015). This baghouse monitoring plan is subject to approval by the Administrator. The owner or operator shall operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. The plan must address all of the items identified in paragraphs (b)(4)(i) through (v) of this section.**

**(i) Installation of the bag leak detection system.**

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

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

**(iv) How the bag leak detection system will be maintained including a routine maintenance schedule and spare parts inventory list.**

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

**(5) Corrective action plan for each baghouse. The plan must include the requirement that, in the event a bag leak detection system alarm is triggered, you must initiate corrective action to determine the cause of the alarm within 1 hour of the alarm, initiate corrective action to correct the cause of the problem within 24 hours of the alarm, and complete the corrective action as soon as practicable. Corrective actions taken may include, but are not limited to:**

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

**(ii) Sealing off defective bags or filter media.**

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

**(iv) Sealing off a defective baghouse compartment.**

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

**(vi) Making process changes.**

**(vii) Shutting down the process producing the PM emissions.**

**(6) Procedures for providing an ignition source to mold vents of sand mold systems in each pouring area and pouring station unless you determine the mold vent gases either are not ignitable, ignite automatically, or cannot be ignited due to accessibility or safety issues. You must document and maintain records of this determination. The determination of ignitability, accessibility, and safety may encompass multiple casting patterns provided the castings utilize similar sand-to-metal ratios, binder formulations, and coating materials. The determination of ignitability must be based on observations of the mold vents within 5 minutes of pouring, and the flame must be present for at least 15 seconds for the mold vent to be considered ignited. For the purpose of this determination:**

**(i) Mold vents that ignite more than 75 percent of the time without the presence of an auxiliary ignition source are considered to ignite automatically; and**

**(ii) Mold vents that do not ignite automatically and cannot be ignited in the presence of an auxiliary ignition source more than 25 percent of the time are considered to be not ignitable.**

#### **General Compliance Requirements**

**§ 63.7720 What are my general requirements for complying with this subpart?**

**(a) You must be in compliance with the emissions limitations, work practice standards, and operation and maintenance requirements in this subpart at all times, except during periods of startup, shutdown, or malfunction.**

**(b) During the period between the compliance date specified for your iron and steel foundry in §63.7683 and the date when applicable operating limits have been established during the initial performance test, you must maintain a log detailing the operation and maintenance of the process and emissions control equipment.**

**(c) You must develop a written startup, shutdown, and malfunction plan according to the provisions in §63.6(e)(3). The startup, shutdown, and malfunction plan also must specify what constitutes a shutdown of a cupola and how to determine that operating conditions are normal following startup of a cupola.**

#### **Initial Compliance Requirements**

**§ 63.7730 By what date must I conduct performance tests or other initial compliance demonstrations?**

**(a) As required by §63.7(a)(2), you must conduct a performance test no later than 180 calendar days after the compliance date that is specified in §63.7683 for your iron and steel foundry to demonstrate initial compliance with each emissions limitation in §63.7690 that applies to you.**

**(b) For each work practice standard in §63.7700 and each operation and maintenance requirement in §63.7710 that applies to you where initial compliance is not demonstrated using a performance test, you must demonstrate initial compliance no later than 30 calendar days after the compliance date that is specified for your iron and steel foundry in §63.7683.**

**§ 63.7731 When must I conduct subsequent performance tests?**

**(a) You must conduct subsequent performance tests to demonstrate compliance with all applicable PM or total metal HAP, VOHAP, and TEA emissions limitations in §63.7690 for your iron and steel foundry no less frequently than every 5 years. The requirement to conduct performance tests every 5 years does not apply to an emissions source for which a continuous emissions monitoring system (CEMS) is used to demonstrate continuous compliance.**

**(b) You must conduct subsequent performance tests to demonstrate compliance with the opacity limit in §63.7690(a)(7) for your iron and steel foundry no less frequently than once every 6 months.**

**§ 63.7732 What test methods and other procedures must I use to demonstrate initial compliance with the emissions limitations?**

**(a) You must conduct each performance test that applies to your iron and steel foundry according to the requirements in §63.7(e)(1) and the conditions specified in paragraphs (b) through (h) of this section.**

**(b) To determine compliance with the applicable emissions limit for PM in §63.7690(a)(1) through (6) for a metal melting furnace, scrap preheater, pouring station, or pouring area, follow the test methods and procedures in paragraphs (b)(1) through (5) of this section.**

**(1) Determine the concentration of PM according to the test methods in 40 CFR part 60, appendix A that are specified in paragraphs (b)(1)(i) through (v) of this section.**

**(i) Method 1 or 1A to select sampling port locations and the number of traverse points in each stack or duct. Sampling sites must be located at the outlet of the control device (or at the outlet of the emissions source if no control device is present) prior to any releases to the atmosphere.**

**(ii) Method 2, 2A, 2C, 2D, 2F, or 2G to determine the volumetric flow rate of the stack gas.**

**(iii) Method 3, 3A, or 3B to determine the dry molecular weight of the stack gas.**

**(iv) Method 4 to determine the moisture content of the stack gas.**

**(v) Method 5, 5B, 5D, 5F, or 5I, as applicable, to determine the PM concentration. The PM concentration is determined using only the front-half (probe rinse and filter) of the PM catch.**

- (2) Collect a minimum sample volume of 60 dscf of gas during each PM sampling run. A minimum of three valid test runs are needed to comprise a performance test.**
- (4) For electric arc and electric induction metal melting furnaces, sample only when metal is being melted.**
- (c) To determine compliance with the applicable emissions limit for total metal HAP in §63.7690(a)(1) through (6) for a metal melting furnace, scrap preheater, pouring station, or pouring area, follow the test methods and procedures in paragraphs (c)(1) through (5) of this section.**
- (1) Determine the concentration of total metal HAP according to the test methods in 40 CFR part 60, appendix A that are specified in paragraphs (c)(1)(i) through (v) of this section.**
- (i) Method 1 or 1A to select sampling port locations and the number of traverse points in each stack or duct. Sampling sites must be located at the outlet of the control device (or at the outlet of the emissions source if no control device is present) prior to any releases to the atmosphere.**
- (ii) Method 2, 2A, 2C, 2D, 2F, or 2G to determine the volumetric flow rate of the stack gas.**
- (iii) Method 3, 3A, or 3B to determine the dry molecular weight of the stack gas.**
- (iv) Method 4 to determine the moisture content of the stack gas.**
- (v) Method 29 to determine the total metal HAP concentration.**
- (2) Collect a minimum sample volume of 60 dscf of gas during each total metal HAP sampling run. A minimum of three valid test runs are needed to comprise a performance test.**
- (4) For electric arc and electric induction metal melting furnaces, sample only when metal is being melted.**
- (d) To determine compliance with the opacity limit in §63.7690(a)(7) for fugitive emissions from buildings or structures housing any emissions source at the iron and steel foundry, follow the procedures in paragraphs (d)(1) and (2) of this section.**
- (1) Using a certified observer, conduct each opacity test according to the requirements in EPA Method 9 (40 CFR part 60, appendix A) and §63.6(h)(5).**
- (2) Conduct each test such that the opacity observations overlap with the PM performance tests.**
- (h) To determine compliance with the PM or total metal HAP emissions limits in §63.7690(a)(1) through (6) when one or more regulated emissions sources are combined with either another regulated emissions source subject to a different emissions limit or other non-regulated emissions sources, you may demonstrate compliance using one of the procedures in paragraphs (h)(1) through (3) of this section.**
- (1) Meet the most stringent applicable emissions limit for the regulated emissions sources included in the combined emissions stream for the combined emissions stream.**
- (2) Use the procedures in paragraphs (h)(2)(i) through (iii) of this section.**
- (i) Determine the volumetric flow rate of the individual regulated streams for which emissions limits apply.**
- (ii) Calculate the flow-weighted average emissions limit, considering only the regulated streams, using Equation 3 of this section, except  $C_w$  is the flow-weighted average emissions limit for PM or total metal HAP in the exhaust stream, gr/dscf; and  $C_i$  is the concentration of PM or total metal HAP in exhaust stream "i", gr/dscf.**
- (iii) Meet the calculated flow-weighted average emissions limit for the regulated emissions sources included in the combined emissions stream for the combined emissions stream.**
- (3) Use the procedures in paragraphs (h)(3)(i) through (iii) of this section.**
- (i) Determine the PM or total metal HAP concentration of each of the regulated streams prior to the combination with other exhaust streams or control device.**
- (ii) Measure the flow rate and PM or total metal HAP concentration of the combined exhaust stream both before and after the control device and calculate the mass removal efficiency of the control device using Equation 4 of this section, except  $E_i$  is the mass emissions rate of PM or total metal HAP at the control device inlet, lb/hr and  $E_o$  is the mass emissions rate of PM or total metal HAP at the control device outlet, lb/hr**
- (iii) Meet the applicable emissions limit based on the calculated PM or total metal HAP concentration for the regulated emissions source using Equation 5 of this section:**

$$C_{\text{released}} = C_i \times \left( 1 - \frac{\% \text{ reduction}}{100} \right) \quad (\text{Eq. 5})$$

**Where:**

$C_{\text{released}}$  = Calculated concentration of PM (or total metal HAP) predicted to be released to the atmosphere from the regulated emissions source, in gr/dscf; and  
 $C_i$  = Concentration of PM (or total metal HAP) in the uncontrolled regulated exhaust stream, in gr/dscf.

**§ 63.7733 What procedures must I use to establish operating limits?**

- (a) For each capture system subject to operating limits in §63.7690(b)(1)(ii), you must establish site-specific operating limits in your operation and maintenance plan according to the procedures in paragraphs (a)(1) through (3) of this section.
- (1) Concurrent with applicable emissions and opacity tests, measure and record values for each of the operating limit parameters in your capture system operation and maintenance plan according to the monitoring requirements in §63.7740(a).
- (2) For any dampers that are manually set and remain at the same position at all times the capture system is operating, the damper position must be visually checked and recorded at the beginning and end of each run.
- (3) Review and record the monitoring data. Identify and explain any times the capture system operated outside the applicable operating limits.
- (e) You may change the operating limits for a capture system, wet scrubber, acid wet scrubber, or combustion device if you meet the requirements in paragraphs (e)(1) through (3) of this section.
- (1) Submit a written notification to the Administrator of your request to conduct a new performance test to revise the operating limit.
- (2) Conduct a performance test to demonstrate compliance with the applicable emissions limitation in §63.7690.
- (3) Establish revised operating limits according to the applicable procedures in paragraphs (a) through (d) of this section.
- (f) You may use a previous performance test (conducted since December 22, 2002) to establish an operating limit provided the test meets the requirements of this subpart.

**§ 63.7734 How do I demonstrate initial compliance with the emissions limitations that apply to me?**

- (a) You have demonstrated initial compliance with the emissions limits in §63.7690(a) if:
- (1) For each electric arc metal melting furnace, electric induction metal melting furnace, or scrap preheater at an existing iron and steel foundry,
- (i) The average PM concentration in the exhaust stream, determined according to the performance test procedures in §63.7732(b), did not exceed 0.005 gr/dscf;
- (5) For each pouring station at an existing iron and steel foundry,
- (i) The average PM concentration in the exhaust stream, measured according to the performance test procedures in §63.7732(b), did not exceed 0.010 gr/dscf;
- (7) For each building or structure housing any emissions source at the iron and steel foundry, the opacity of fugitive emissions discharged to the atmosphere, determined according to the performance test procedures in §63.7732(d), did not exceed 20 percent (6-minute average), except for one 6-minute average per hour that did not exceed 27 percent opacity.
- (b) You have demonstrated initial compliance with the operating limits in §63.7690(b) if:
- (1) For each capture system subject to the operating limit in §63.7690(b)(1)(ii),
- (i) You have established appropriate site-specific operating limits in your operation and maintenance plan according to the requirements in §63.7710(b); and
- (ii) You have a record of the operating parameter data measured during the performance test in accordance with §63.7733(a)

**§ 63.7735 How do I demonstrate initial compliance with the work practice standards that apply to me?**

**(a) For each iron and steel foundry subject to the certification requirement in §63.7700(b), you have demonstrated initial compliance if you have certified in your notification of compliance status that: “At all times, your foundry will purchase and use only metal ingots, pig iron, slitter, or other materials that do not include post-consumer automotive body scrap, post-consumer engine blocks, post-consumer oil filters, oily turnings, lead components, mercury switches, plastics, or free organic liquids.”**

**§ 63.7736 How do I demonstrate initial compliance with the operation and maintenance requirements that apply to me?**

**(c) For each bag leak detection system, you have demonstrated initial compliance if you have certified in your notification of compliance status that:**

**(1) You have submitted the bag leak detection system monitoring plan to the Administrator for approval according to the requirements of §63.7710(b);**

**(2) You will inspect, operate, and maintain each bag leak detection system according to the procedures in the plan; and**

**(3) You will follow the corrective action procedures for bag leak detection system alarms according to the requirements in the plan.**

**(d) For each pouring area and pouring station in a new or existing foundry, you have demonstrated initial compliance if you have certified in your notification of compliance status report that:**

**(1) You have submitted the mold vent ignition plan to the Administrator for approval according to the requirements in §63.7710(b); and**

**(2) You will follow the procedures for igniting mold vent gases according to the requirements in the plan.**

**Continuous Compliance Requirements**

**§ 63.7740 What are my monitoring requirements?**

**(b) For each negative pressure baghouse or positive pressure baghouse equipped with a stack that is applied to meet any PM or total metal HAP emissions limitation in this subpart, you must at all times monitor the relative change in PM loadings using a bag leak detection system according to the requirements in §63.7741(b) and conduct inspections at their specified frequencies according to the requirements specified in paragraphs (b)(1) through (8) of this section.**

**(1) Monitor the pressure drop across each baghouse cell each day to ensure pressure drop is within the normal operating range identified in the manual.**

**(2) Confirm that dust is being removed from hoppers through weekly visual inspections or other means of ensuring the proper functioning of removal mechanisms.**

**(3) Check the compressed air supply for pulse-jet baghouses each day.**

**(4) Monitor cleaning cycles to ensure proper operation using an appropriate methodology.**

**(5) Check bag cleaning mechanisms for proper functioning through monthly visual inspection or equivalent means.**

**(6) Make monthly visual checks of bag tension on reverse air and shaker-type baghouses to ensure that bags are not kinked (knead or bent) or lying on their sides. You do not have to make this check for shaker-type baghouses using self-tensioning (spring-loaded) devices.**

**(7) Confirm the physical integrity of the baghouse through quarterly visual inspections of the baghouse interior for air leaks.**

**(8) Inspect fans for wear, material buildup, and corrosion through quarterly visual inspections, vibration detectors, or equivalent means.**

**§ 63.7741 What are the installation, operation, and maintenance requirements for my monitors?**

**(b) You must install, operate, and maintain a bag leak detection system according to the requirements in paragraphs (b)(1) through (7) of this section.**

- (1) The system must be certified by the manufacturer to be capable of detecting emissions of particulate matter at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.
- (2) The bag leak detection system sensor must provide output of relative particulate matter loadings and the owner or operator shall continuously record the output from the bag leak detection system using electronic or other means (e.g., using a strip chart recorder or a data logger).
- (3) The system must be equipped with an alarm that will sound when an increase in relative particulate loadings is detected over the alarm set point established in the operation and maintenance plan, and the alarm must be located such that it can be heard by the appropriate plant personnel.
- (4) The initial adjustment of the system must, at minimum, consist of establishing the baseline output by adjusting the sensitivity (range) and the averaging period of the device, and establishing the alarm set points and the alarm delay time (if applicable).
- (5) Following the initial adjustment, do not adjust the sensitivity or range, averaging period, alarm set point, or alarm delay time without approval from the Administrator. Except, once per quarter, you may adjust the sensitivity of the bag leak detection system to account for seasonable effects including temperature and humidity according to the procedures in the operation and maintenance plan required by §63.7710(b).
- (6) For negative pressure, induced air baghouses, and positive pressure baghouses that are discharged to the atmosphere through a stack, the bag leak detector sensor must be installed downstream of the baghouse and upstream of any wet scrubber.
- (7) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.

**§ 63.7742 How do I monitor and collect data to demonstrate continuous compliance?**

- (a) Except for monitoring malfunctions, associated repairs, and required quality assurance or control activities (including as applicable, calibration checks and required zero and span adjustments), you must monitor continuously (or collect data at all required intervals) any time a source of emissions is operating.
- (b) You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emissions or operating levels or to fulfill a minimum data availability requirement, if applicable. You must use all the data collected during all other periods in assessing compliance.
- (c) A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

**§ 63.7743 How do I demonstrate continuous compliance with the emissions limitations that apply to me?**

- (a) You must demonstrate continuous compliance by meeting the applicable conditions in paragraphs (a)(1) through (12) of this section:
  - (1) For each electric arc metal melting furnace, electric induction metal melting furnace, or scrap preheater at an existing iron and steel foundry,
    - (i) Maintaining the average PM concentration in the exhaust stream at or below 0.005 gr/dscf;
    - (5) For each pouring station at an existing iron and steel foundry,
      - (i) Maintaining the average PM concentration in the exhaust stream at or below 0.010 gr/dscf;
      - (7) For each building or structure housing any emissions source at the iron and steel foundry, maintaining the opacity of any fugitive emissions discharged to the atmosphere at or below 20 percent opacity (6-minute average), except for one 6-minute average per hour that does not exceed 27 percent opacity.
      - (12) Conducting subsequent performance tests at least every 5 years for each emissions source subject to an emissions limit for PM, total metal HAP, VOHAP, or TEA in §63.7690(a)

and subsequent performance tests at least every 6 months for each building or structure subject to the opacity limit in §63.7690(a)(7).

(c) For each baghouse equipped with a bag leak detection system,

(1) Maintaining records of the times the bag leak detection system alarm sounded, and for each valid alarm, the time you initiated corrective action, the corrective action taken, and the date on which corrective action was completed; and

(2) Inspecting and maintaining each baghouse according to the requirements of §63.7740(b)(1) through (8) and recording all information needed to document conformance with these requirements.

**§ 63.7744** How do I demonstrate continuous compliance with the work practice standards that apply to me?

(a) You must maintain records that document continuous compliance with the certification requirements in §63.7700(b) or with the procedures in your scrap selection and inspection plan required in §63.7700(c). Your records documenting compliance with the scrap selection and inspection plan must include a copy (kept onsite) of the procedures used by the scrap supplier for either removing accessible mercury switches or for purchasing automobile bodies that have had mercury switches removed, as applicable.

**§ 63.7745** How do I demonstrate continuous compliance with the operation and maintenance requirements that apply to me?

(a) For each capture system and control device for an emissions source subject to an emissions limit in §63.7690(a), you must demonstrate continuous compliance with the operation and maintenance requirements of §63.7710 by:

(1) Making monthly inspections of capture systems and initiating corrective action according to §63.7710(b)(1) and recording all information needed to document conformance with these requirements;

(2) Performing preventative maintenance for each control device according to the preventive maintenance plan required by §63.7710(b)(3) and recording all information needed to document conformance with these requirements;

(3) Operating and maintaining each bag leak detection system according to the site-specific monitoring plan required by §63.7710(b)(4) and recording all information needed to demonstrate conformance with these requirements;

(4) Initiating and completing corrective action for a bag leak detection system alarm according to the corrective action plan required by §63.7710(b)(5) and recording all information needed to document conformance with these requirements; and

(5) Igniting gases from mold vents according to the procedures in the plan required by §63.7710(b)(6). (Any instance where you fail to follow the procedures is a deviation that must be included in your semiannual compliance report.)

(b) You must maintain a current copy of the operation and maintenance plans required by §63.7710(b) onsite and available for inspection upon request. You must keep the plans for the life of the iron and steel foundry or until the iron and steel foundry is no longer subject to the requirements of this subpart.

**§ 63.7746** What other requirements must I meet to demonstrate continuous compliance?

(a) *Deviations.* You must report each instance in which you did not meet each emissions limitation in §63.7690 (including each operating limit) that applies to you. This requirement includes periods of startup, shutdown, and malfunction. You also must report each instance in which you did not meet each work practice standard in §63.7700 and each operation and maintenance requirement of §63.7710 that applies to you. These instances are deviations from the emissions limitations, work practice standards, and operation and maintenance requirements in this subpart. These deviations must be reported according to the requirements of §63.7751.

(b) *Startups, shutdowns, and malfunctions.* (1) Consistent with the requirements of §§63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if you demonstrate to the Administrator's satisfaction that you were operating in accordance with §63.6(e)(1).

**(2) The Administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations according to the provisions in §63.6(e).**

#### **Notifications, Reports, and Records**

##### **§ 63.7750 What notifications must I submit and when?**

- (a) You must submit all of the notifications required by §§63.6(h)(4) and (5), 63.7(b) and (c); 63.8(e); 63.8(f)(4) and (6); 63.9(b) through (h) that apply to you by the specified dates.**
- (b) As specified in §63.9(b)(2), if you start up your iron and steel foundry before April 22, 2004, you must submit your initial notification no later than August 20, 2004.**
- (d) If you are required to conduct a performance test, you must submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin as required by §63.7(b)(1).**
- (e) If you are required to conduct a performance test or other initial compliance demonstration, you must submit a notification of compliance status according to the requirements of §63.9(h)(2)(ii).**
- (1) For each initial compliance demonstration that does not include a performance test, you must submit the notification of compliance status before the close of business on the 30th calendar day following completion of the initial compliance demonstration.**
- (2) For each initial compliance demonstration that does include a performance test, you must submit the notification of compliance status, including the performance test results, before the close of business on the 60th calendar day following the completion of the performance test according to the requirement specified in §63.10(d)(2).**

##### **§ 63.7751 What reports must I submit and when?**

- (a) Compliance report due dates. Unless the Administrator has approved a different schedule, you must submit a semiannual compliance report to your permitting authority according to the requirements specified in paragraphs (a)(1) through (5) of this section.**
  - (1) The first compliance report must cover the period beginning on the compliance date that is specified for your iron and steel foundry by §63.7683 and ending on June 30 or December 31, whichever date comes first after the compliance date that is specified for your iron and steel foundry.**
  - (2) The first compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date comes first after your first compliance report is due.**
  - (3) Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.**
  - (4) Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date comes first after the end of the semiannual reporting period.**
  - (5) For each iron and steel foundry that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of the dates specified in paragraphs (a)(1) through (4) of this section.**
- (b) Compliance report contents. Each compliance report must include the information specified in paragraphs (b)(1) through (3) of this section and, as applicable, paragraphs (b)(4) through (8) of this section.**
  - (1) Company name and address.**
  - (2) Statement by a responsible official, with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.**
  - (3) Date of report and beginning and ending dates of the reporting period.**
  - (4) If you had a startup, shutdown, or malfunction during the reporting period and you took action consistent with your startup, shutdown, and malfunction plan, the compliance report must include the information in §63.10(d)(5)(i).**

- (5) If there were no deviations from any emissions limitations (including operating limit), work practice standards, or operation and maintenance requirements, a statement that there were no deviations from the emissions limitations, work practice standards, or operation and maintenance requirements during the reporting period.**
- (6) If there were no periods during which a continuous monitoring system (including a CPMS or CEMS) was out-of-control as specified by §63.8(c)(7), a statement that there were no periods during which the CPMS was out-of-control during the reporting period.**
- (7) For each deviation from an emissions limitation (including an operating limit) that occurs at an iron and steel foundry for which you are not using a continuous monitoring system (including a CPMS or CEMS) to comply with an emissions limitation or work practice standard required in this subpart, the compliance report must contain the information specified in paragraphs (b)(1) through (4) and (b)(7)(i) and (ii) of this section. This requirement includes periods of startup, shutdown, and malfunction.**
- (i) The total operating time of each emissions source during the reporting period.**
- (ii) Information on the number, duration, and cause of deviations (including unknown cause) as applicable and the corrective action taken.**
- (8) For each deviation from an emissions limitation (including an operating limit) or work practice standard occurring at an iron and steel foundry where you are using a continuous monitoring system (including a CPMS or CEMS) to comply with the emissions limitation or work practice standard in this subpart, you must include the information specified in paragraphs (b)(1) through (4) and (b)(8)(i) through (xi) of this section. This requirement includes periods of startup, shutdown, and malfunction.**
- (i) The date and time that each malfunction started and stopped.**
- (ii) The date and time that each continuous monitoring system was inoperative, except for zero (low-level) and high-level checks.**
- (iii) The date, time, and duration that each continuous monitoring system was out-of-control, including the information in §63.8(c)(8).**
- (iv) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.**
- (v) A summary of the total duration of the deviations during the reporting period and the total duration as a percent of the total source operating time during that reporting period.**
- (vi) A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and unknown causes.**
- (vii) A summary of the total duration of continuous monitoring system downtime during the reporting period and the total duration of continuous monitoring system downtime as a percent of the total source operating time during the reporting period.**
- (viii) A brief description of the process units.**
- (ix) A brief description of the continuous monitoring system.**
- (x) The date of the latest continuous monitoring system certification or audit.**
- (xi) A description of any changes in continuous monitoring systems, processes, or controls since the last reporting period.**
- (c) Immediate startup, shutdown, and malfunction report. If you had a startup, shutdown, or malfunction during the semiannual reporting period that was not consistent with your startup, shutdown, and malfunction plan, you must submit an immediate startup, shutdown, and malfunction report according to the requirements of §63.10(d)(5)(ii).**
- (d) Part 70 monitoring report. If you have obtained a title V operating permit for an iron and steel foundry pursuant to 40 CFR part 70 or 40 CFR part 71, you must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If you submit a compliance report for an iron and steel foundry along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the compliance report includes all the required information concerning deviations from any emissions limitation or operation and maintenance requirement in this subpart, submission of the compliance report satisfies any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report does not otherwise affect any obligation you**

**may have to report deviations from permit requirements for an iron and steel foundry to your permitting authority.**

**§ 63.7752 What records must I keep?**

**(a) You must keep the records specified in paragraphs (a)(1) through (4) of this section:**

**(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any initial notification or notification of compliance status that you submitted, according to the requirements of §63.10(b)(2)(xiv).**

**(2) The records specified in §63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.**

**(3) Records of performance tests and performance evaluations as required by §63.10(b)(2)(viii).**

**(c) You must keep the records required by §§63.7743, 63.7744, and 63.7745 to show continuous compliance with each emissions limitation, work practice standard, and operation and maintenance requirement that applies to you.**

**§ 63.7753 In what form and for how long must I keep my records?**

**(a) You must keep your records in a form suitable and readily available for expeditious review, according to the requirements of §63.10(b)(1).**

**(b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.**

**(c) You must keep each record onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record according to the requirements in §63.10(b)(1). You can keep the records for the previous 3 years offsite.**

**Other Requirements and Information**

**§ 63.7760 What parts of the General Provisions apply to me?**

**Table 1 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you.**

**§ 63.7761 Who implements and enforces this subpart?**

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

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

**(c) The authorities that cannot be delegated to State, local, or tribal agencies are specified in paragraphs (c)(1) through (4) of this section.**

**(1) Approval of alternatives to non-opacity emissions limitations in §63.7690 and work practice standards in §63.7700 under §63.6(g).**

**(2) Approval of major alternatives to test methods under §63.7(e)(2)(ii) and (f) and as defined in §63.90.**

**(3) Approval of major alternatives to monitoring under §63.8(f) and as defined in §63.90.**

**(4) Approval of major alternatives to recordkeeping and reporting under §63.10(f) and as defined in §63.90.**

**Definitions**

**§ 63.7765 What definitions apply to this subpart?**

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

***Automated conveyor and pallet cooling line*** means any dedicated conveyor line or area used for cooling molds received from pouring stations.

***Automated shakeout line*** means any mechanical process unit designed for and dedicated to separating a casting from a mold. These mechanical processes include, but are not limited to, shaker decks, rotary separators, and high-frequency vibration units. Automated shakeout lines do not include manual processes for separating a casting from a mold, such as personnel using a hammer, chisel, pick ax, sledge hammer, or jackhammer.

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

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

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

***Cold box mold or core making line*** means a mold or core making line in which the formed aggregate is hardened by catalysis with a gas.

***Combustion device*** means an afterburner, thermal incinerator, or scrap preheater.

***Conveyance*** means the system of equipment that is designed to capture pollutants at the source, convey them through ductwork, and exhaust them using forced ventilation. A conveyance may, but does not necessarily include, control equipment designed to reduce emissions of the pollutants. Emissions that are released through windows, vents, or other general building ventilation or exhaust systems are not considered to be discharged through a conveyance.

***Cooling*** means the process of molten metal solidification within the mold and subsequent temperature reduction prior to shakeout.

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

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

- (1) Fails to meet any requirement or obligation established by this subpart including, but not limited to, any emissions limitation (including operating limits), work practice standard, or operation and maintenance requirement;
- (2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any iron and steel foundry required to obtain such a permit; or
- (3) Fails to meet any emissions limitation (including operating limits) or work practice standard in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.

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

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

***Emissions limitation*** means any emissions limit or operating limit.

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

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

***Fresh acid solution*** means a sulfuric acid solution used for the control of triethylamine emissions that has a pH of 2.0 or less.

***Fugitive emissions*** means any pollutant released to the atmosphere that is not discharged through a conveyance as defined in this subpart.

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

***Hazardous air pollutant*** means any substance on the list originally established in 112(b)(1) of the CAA and subsequently amended as published in the *Code of Federal Regulations*.

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

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

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

***Mold vent*** means an intentional opening in a mold through which gases containing pyrolysis products of organic mold and core constituents produced by contact with or proximity to molten metal normally escape the mold during and after metal pouring.

***Pouring area*** means an area, generally associated with floor and pit molding operations, in which molten metal is brought to each individual mold. Pouring areas include all pouring operations that do not meet the definition of a pouring station.

**Pouring station** means the fixed location to which molds are brought in a continuous or semicontinuous manner to receive molten metal, after which the molds are moved to a cooling area.

**Responsible official** means responsible official as defined in §63.2.

**Scrap preheater** means a vessel or other piece of equipment in which metal scrap that is to be used as melting furnace feed is heated to a temperature high enough to eliminate moisture and other volatile impurities or tramp materials by direct flame heating or similar means of heating.

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

**Work practice standard** means any design, equipment, work practice, or operational standard, or combination thereof, that is promulgated pursuant to section 112(h) of the CAA.

Table 1 to Subpart EEEEE of Part 63—Applicability of General Provisions to Subpart EEEEE

[As stated in § 63.7760, you must meet each requirement in the following table that applies to you.]

| Citation  | Subject   | Applies to Subpart EEEEE? | Explanation  |
|---|---|---------------------------|--|
| 63.1.....   | Applicability.....  | Yes.....                  |  |
| 63.2.....   | Definitions.....  | Yes.....                  |  |
| 63.3.....   | Units and abbreviations                                     | Yes.....                  |  |
| 63.4.....   | Prohibited activities..                                     | Yes.....                  |  |
| 63.5.....   | Construction/reconstruction.                                | Yes.....                  |  |
| 63.6(a)-(g).....  | Compliance with standards and maintenance requirements.     | Yes.....                  |  |
| 63.6(h).....  | Opacity and visible emissions standards.                    | Yes.....                  |  |
| 63.6(i)-(j).....  | Compliance extension and Presidential compliance exemption. | Yes.....                  |  |
| 63.7(a)(1)-(a)(2).....  | Applicability and performance test dates.                   | No.....                   | Subpart EEEEE specifies applicability and performance test dates.        |
| 63.7(a)(3), (b)-(h).....  | Performance testing requirements.                           | Yes.....                  |  |
| 63.8(a)(1)-(a)(3), (b), (c)(1)-(c)(3), (c)(6)-(c)(8), (d), (e), (f)(1)-(f)(6), (g)(1)-(g)(4). | Monitoring requirements                                     | Yes.....                  | Subpart EEEEE specifies requirements for alternative monitoring systems. |

| Citation  | Subject  | Applies to Subpart EEEEE? | Explanation  |
|---|--|---------------------------|--|
| 63.8(a)(4).....   | Additional monitoring requirements for control devices in §63.11.  | No.....                   | Subpart EEEEE does not require flares.                                       |
| 63.8(c)(4).....   | Continuous monitoring system (CMS) requirements.   | No.....                   | Subpart EEEEE specifies requirements for operation of CMS and CEMS.          |
| 63.8(c)(5).....   | Continuous opacity monitoring system (COMS) Minimum Procedures.  | No.....                   | Subpart EEEEE does not require COMS.   |
| 63.8(g)(5).....   | Data reduction.....  | No.....                   | Subpart EEEEE specifies data reduction requirements.                         |
| 63.9.....   | Notification requirements.   | Yes.....                  |  |
| 63.10(a)-(b), (c)(1)-(6), (c)(9)-(15), (d)(1)-(2), (e)(1)-(2), (f). | Recordkeeping and reporting requirements.  | Yes.....                  | Additional records for CMS in §63.10(c)(1)-(6), (9)-(15) apply only to CEMS. |
| 63.10(c)(7)-(8).....  | Records of excess emissions and parameter monitoring exceedances for CMS.  | No.....                   | Subpart EEEEE specifies records requirements.                                |
| 63.10(d)(3).....  | Reporting opacity or visible emissions observations.   | Yes.....                  |  |
| 63.10(e)(3).....  | Excess emissions reports.  | No.....                   | Subpart EEEEE specifies reporting requirements.                              |
| 63.10(e)(4).....  | Reporting COMS data....  | No.....                   | Subpart EEEEE data does not require COMS.                                    |
| 63.11.....  | Control device requirements.   | No.....                   | Subpart EEEEE does not require flares.                                       |
| 63.12.....  | State authority and delegations.   | Yes.....                  |  |
| 63.13-63.15.....  | Addresses of State air pollution control agencies and EPA regional offices. Incorporation by reference. Availability of information and confidentiality. | Yes.....                  |  |

INTAT Precision, Inc.  
Rushville, Indiana  
Permit Reviewer: TE/EVP

Page 117 of 153  
Source Modification No.: 139-22701-00011  
Permit Modification No.: 139-22744-00011

**E.1.3 One Time Deadlines Relating to National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries [40 CFR Part 63, Subpart EEEEE]**

The Permittee shall comply with the following requirements by the dates listed:

| Requirement   | Rule Cite         | Affected Facility  | Deadline                         |
|---|-------------------|--|----------------------------------|
| Initial performance tests   | 40 CFR<br>63.7730 | above listed facilities  | 180 days after<br>April 23, 2007 |
| Work Practice Standards   | 40 CFR<br>63.7700 | above listed facilities  | April 22, 2005                   |
| Operation and Maintenance   | 40 CFR<br>63.7710 | iron and steel foundry, including air pollution control and monitoring equipment | April 23, 2007                   |
| Initial Compliance Demonstration for Work Practice Standards                | 40 CFR<br>63.7730 | above listed facilities  | 30 days after<br>April 22, 2005  |
| Initial Compliance Demonstration for Operation and Maintenance Requirements | 40 CFR<br>63.7730 | iron and steel foundry, including air pollution control and monitoring equipment | 30 days after<br>April 23, 2007  |

**SECTION E.2 FACILITY OPERATION CONDITIONS**

|   |
|---|
| <p><b>Facility Description [326 IAC 2-7-5(15)]:</b></p> <p><b>Insignificant Activities</b></p> <p>(k) Other activities or categories not previously identified:</p> <p>(8) Two (2) fixed roof resin storage tanks, each with a maximum storage capacity of 2,000 gallons [40 CFR 63, Subpart EEEE].</p> <p>Under the Organic Liquids Distribution (Non-Gasoline) NESHAP (40 CFR 63, Subpart EEEE), the two (2) fixed roof resin storage tanks are considered an existing affected source.</p> <p>(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)</p> |
|---|

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

**E.2.1 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants under 40 CFR Part 63 [326 IAC 20-1] [40 CFR Part 63, Subpart A]**

- (a) Pursuant to 40 CFR 63.2398, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1-1 for the two (2) fixed roof resin storage tanks as specified in Table 12 of 40 CFR 63, Subpart EEEE in accordance with schedule in 40 CFR 63 Subpart EEEE.
- (b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports to:

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

**E.2.2 Organic Liquids Distribution (Non-Gasoline) NESHAP Requirements [40 CFR Part 63, Subpart EEEE] [326 IAC 20-83]**

---

Pursuant to CFR Part 63, Subpart EEEE, the Permittee shall comply with the provisions of the Organic Liquids Distribution (Non-Gasoline) NESHAP, which are incorporated by reference as 326 IAC 20-83 for the two (2) fixed roof resin storage tanks as specified as follows.

**What This Subpart Covers**

**§ 63.2330 What is the purpose of this subpart?**

This subpart establishes national emission limitations, operating limits, and work practice standards for organic hazardous air pollutants (HAP) emitted from organic liquids distribution (OLD) (non-gasoline) operations at major sources of HAP emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations, operating limits, and work practice standards.

**§ 63.2334 Am I subject to this subpart?**

(a) Except as provided for in paragraphs (b) and (c) of this section, you are subject to this subpart if you own or operate an OLD operation that is located at, or is part of, a major source of HAP emissions. An OLD operation may occupy an entire plant site or be collocated with other industrial ( e.g., manufacturing) operations at the same plant site.

**§ 63.2338 What parts of my plant does this subpart cover?**

(a) This subpart applies to each new, reconstructed, or existing OLD operation affected source.

(b) Except as provided in paragraph (c) of this section, the affected source is the collection of activities and equipment used to distribute organic liquids into, out of, or within a facility that is a major source of HAP. The affected source is composed of:

(1) All storage tanks storing organic liquids.

(3) All equipment leak components in organic liquids service that are associated with:

(i) Storage tanks storing organic liquids;

(iii) Pipelines that transfer organic liquids directly between two storage tanks that are subject to this subpart;

(f) An affected source is existing if it is not new or reconstructed.

**§ 63.2342 When do I have to comply with this subpart?**

(b)(1) If you have an existing affected source, you must comply with the emission limitations, operating limits, and work practice standards for existing affected sources no later than February 5, 2007, except as provided in paragraphs (b)(2) and (3) of this section.

(d) You must meet the notification requirements in §§63.2343 and 63.2382(a), as applicable, according to the schedules in §63.2382(a) and (b)(1) through (3) and in subpart A of this part. Some of these notifications must be submitted before the compliance dates for the emission limitations, operating limits, and work practice standards in this subpart.

**§ 63.2343 What are my requirements for emission sources not requiring control?**

This section establishes the notification, recordkeeping, and reporting requirements for emission sources identified in §63.2338 that do not require control under this subpart (i.e., under paragraphs (a) through (e) of §63.2346). Such emission sources are not subject to any other notification, recordkeeping, or reporting sections in this subpart, including §63.2350(c), except as indicated in paragraphs (a) through (d) of this section.

(a) For each storage tank subject to this subpart having a capacity of less than 18.9 cubic meters (5,000 gallons) and for each transfer rack subject to this subpart that only unloads organic liquids (i.e., no organic liquids are loaded at any of the transfer racks), you must keep documentation that verifies that each storage tank and transfer rack identified in paragraph (a) of this section is not required to be controlled. The documentation must be kept up-to-date (i.e., all such emission sources at a facility are identified in the documentation regardless of when the documentation was last compiled) and must be in a form suitable and readily available for expeditious inspection and review according to §63.10(b)(1), including records stored in electronic form in a separate location. The documentation may consist of identification of the tanks and transfer racks identified in paragraph (a) of this section on a plant site plan or process and instrumentation diagram (P&ID).

(d) If one or more of the events identified in paragraphs (d)(1) through (4) of this section occur since the filing of the Notification of Compliance Status or the last Compliance report, you must submit a subsequent Compliance report as specified in paragraphs (b)(3) and (c)(3) of this section.

(1) Any storage tank or transfer rack became subject to control under this subpart EEEE; or

(2) Any storage tank equal to or greater than 18.9 cubic meters (5,000 gallons) became part of the affected source but is not subject to any of the emission limitations, operating limits, or work practice standards of this subpart; or

(3) Any transfer rack (except those racks at which only unloading of organic liquids occurs) became part of the affected source; or

(4) Any of the information required in §63.2386(c)(1), §63.2386(c)(2), or §63.2386(c)(3) has changed.

#### Notifications, Reports, and Records

**§ 63.2382** What notifications must I submit and when and what information should be submitted?

(a) You must submit each notification in subpart SS of this part, Table 12 to this subpart, and paragraphs (b) through (d) of this section that applies to you. You must submit these notifications according to the schedule in Table 12 to this subpart and as specified in paragraphs (b) through (d) of this section.

(b)(1) *Initial Notification.* If you startup your affected source before February 3, 2004, you must submit the Initial Notification no later than 120 calendar days after February 3, 2004.

**§ 63.2390** What records must I keep?

(a) For each emission source identified in §63.2338 that does not require control under this subpart, you must keep all records identified in §63.2343.

**§ 63.2394** In what form and how long must I keep my records?

(a) Your records must be in a form suitable and readily available for expeditious inspection and review according to §63.10(b)(1), including records stored in electronic form at a separate location.

(b) As specified in §63.10(b)(1), you must keep your files of all information (including all reports and notifications) for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). You may keep the records off site for the remaining 3 years.

## Other Requirements and Information

### § 63.2398 What parts of the General Provisions apply to me?

Table 12 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you.

### § 63.2402 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by the U.S. Environmental Protection Agency (U.S. EPA) or a delegated authority such as your State, local, or eligible tribal agency. If the EPA Administrator has delegated authority to your State, local, or eligible tribal agency, then that agency, as well as the EPA, has the authority to implement and enforce this subpart. You should contact your EPA Regional Office (see list in §63.13) to find out if this subpart is delegated to your State, local, or eligible tribal agency.

(b) In delegating implementation and enforcement authority for this subpart to a State, local, or eligible tribal agency under 40 CFR part 63, subpart E, the authorities contained in paragraphs (b)(1) through (4) of this section are retained by the EPA Administrator and are not delegated to the State, local, or eligible tribal agency.

(1) Approval of alternatives to the nonopacity emission limitations, operating limits, and work practice standards in §63.2346(a) through (c) under §63.6(g).

(2) Approval of major changes to test methods under §63.7(e)(2)(ii) and (f) and as defined in §63.90.

(3) Approval of major changes to monitoring under §63.8(f) and as defined in §63.90.

(4) Approval of major changes to recordkeeping and reporting under §63.10(f) and as defined in §63.90.

### § 63.2406 What definitions apply to this subpart?

Terms used in this subpart are defined in the CAA, in §63.2, 40 CFR part 63, subparts H, PP, SS, TT, UU, and WW, and in this section. If the same term is defined in another subpart and in this section, it will have the meaning given in this section for purposes of this subpart. Notwithstanding the introductory language in §63.921, the terms “container” and “safety device” shall have the meaning found in this subpart and not in §63.921.

*Actual annual average temperature*, for organic liquids, means the temperature determined using the following methods:

(1) For heated or cooled storage tanks, use the calculated annual average temperature of the stored organic liquid as determined from a design analysis of the storage tank.

(2) For ambient temperature storage tanks:

(i) Use the annual average of the local (nearest) normal daily mean temperatures reported by the National Climatic Data Center; or

(ii) Use any other method that the EPA approves.

*Annual average true vapor pressure* means the equilibrium partial pressure exerted by the total Table 1 organic HAP in the stored or transferred organic liquid. For the purpose of determining if a liquid meets the definition of an organic liquid, the vapor pressure is determined using standard conditions of 77 degrees F and 29.92 inches of mercury. For the purpose of determining whether an organic liquid meets the applicability criteria in Table 2, items 1 through 6, to this subpart, use the actual annual average temperature as defined in this subpart. The vapor pressure value in either of these cases is determined:

(1) In accordance with methods described in American Petroleum Institute Publication 2517, *Evaporative Loss from External Floating-Roof Tanks* (incorporated by reference, see §63.14);

(2) Using standard reference texts;

(3) By the American Society for Testing and Materials Method D2879–83, 96 (incorporated by reference, see §63.14); or

(4) Using any other method that the EPA approves.

***Bottoms receiver*** means a tank that collects distillation bottoms before the stream is sent for storage or for further processing downstream.

***Cargo tank*** means a liquid-carrying tank permanently attached and forming an integral part of a motor vehicle or truck trailer. This term also refers to the entire cargo tank motor vehicle or trailer. For the purpose of this subpart, vacuum trucks used exclusively for maintenance or spill response are not considered cargo tanks.

***Closed vent system*** means a system that is not open to the atmosphere and is composed of piping, ductwork, connections, and, if necessary, flow-inducing devices that transport gas or vapors from an emission point to a control device. This system does not include the vapor collection system that is part of some transport vehicles or the loading arm or hose that is used for vapor return. For transfer racks, the closed vent system begins at, and includes, the first block valve on the downstream side of the loading arm or hose used to convey displaced vapors.

***Combustion device*** means an individual unit of equipment, such as a flare, oxidizer, catalytic oxidizer, process heater, or boiler, used for the combustion of organic emissions.

***Container*** means a portable unit in which a material can be stored, transported, treated, disposed of, or otherwise handled. Examples of containers include, but are not limited to, drums and portable cargo containers known as “portable tanks” or “totes.”

***Control device*** means any combustion device, recovery device, recapture device, or any combination of these devices used to comply with this subpart. Such equipment or devices include, but are not limited to, absorbers, adsorbers, condensers, and combustion devices. Primary condensers, steam strippers, and fuel gas systems are not considered control devices.

***Crude oil*** means any of the naturally occurring liquids commonly referred to as crude oil, regardless of specific physical properties. Only those crude oils downstream of the first point of custody transfer after the production field are considered crude oils in this subpart.

***Custody transfer*** means the transfer of hydrocarbon liquids after processing and/or treatment in the producing operations, or from storage tanks or automatic transfer facilities to pipelines or any other forms of transportation.

***Design evaluation*** means a procedure for evaluating control devices that complies with the requirements in §63.985(b)(1)(i).

***Deviation*** means any instance in which an affected source subject to this subpart, or portion thereof, or an owner or operator of such a source:

- (1) Fails to meet any requirement or obligation established by this subpart including, but not limited to, any emission limitation (including any operating limit) or work practice standard;
- (2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart, and that is included in the operating permit for any affected source required to obtain such a permit; or
- (3) Fails to meet any emission limitation (including any operating limit) or work practice standard in this subpart during SSM.

***Emission limitation*** means an emission limit, opacity limit, operating limit, or visible emission limit.

***Equipment leak component*** means each pump, valve, and sampling connection system used in organic liquids service at an OLD operation. Valve types include control, globe, gate, plug, and ball. Relief and check valves are excluded.

***Gasoline*** means any petroleum distillate or petroleum distillate/alcohol blend having a Reid vapor pressure of 27.6 kilopascals (4.0 pounds per square inch absolute (psia)) or greater which is used as a fuel for internal combustion engines. Aviation gasoline is included in this definition.

***High throughput transfer rack*** means those transfer racks that transfer into transport vehicles (for existing affected sources) or into transport vehicles and containers (for new affected sources) a total of 11.8 million liters per year or greater of organic liquids.

***In organic liquids service*** means that an equipment leak component contains or contacts organic liquids having 5 percent by weight or greater of the organic HAP listed in Table 1 to this subpart.

***Low throughput transfer rack*** means those transfer racks that transfer into transport vehicles (for existing affected sources) or into transport vehicles and containers (for new affected sources) less than 11.8 million liters per year of organic liquids.

***On-site or on site*** means, with respect to records required to be maintained by this subpart or required by another subpart referenced by this subpart, that records are stored at a location within a major source which encompasses the affected source. On-site includes, but is not limited to, storage at the affected source to which the records pertain, storage in central files elsewhere at the major source, or electronically available at the site.

***Organic liquid*** means:

- (1) Any non-crude oil liquid or liquid mixture that contains 5 percent by weight or greater of the organic HAP listed in Table 1 to this subpart, as determined using the procedures specified in §63.2354(c).
- (2) Any crude oils downstream of the first point of custody transfer.
- (3) Organic liquids for purposes of this subpart do not include the following liquids:
  - (i) Gasoline (including aviation gasoline), kerosene (No. 1 distillate oil), diesel (No. 2 distillate oil), asphalt, and heavier distillate oils and fuel oils;
  - (ii) Any fuel consumed or dispensed on the plant site directly to users (such as fuels for fleet refueling or for refueling marine vessels that support the operation of the plant);
  - (iii) Hazardous waste;
  - (iv) Wastewater;
  - (v) Ballast water: or
  - (vi) Any non-crude oil liquid with an annual average true vapor pressure less than 0.7 kilopascals (0.1 psia).

***Organic liquids distribution (OLD) operation*** means the combination of activities and equipment used to store or transfer organic liquids into, out of, or within a plant site regardless of the specific activity being performed. Activities include, but are not limited to, storage, transfer, blending, compounding, and packaging.

***Permitting authority*** means one of the following:

- (1) The State Air Pollution Control Agency, local agency, or other agency authorized by the EPA Administrator to carry out a permit program under 40 CFR part 70; or
- (2) The EPA Administrator, in the case of EPA-implemented permit programs under title V of the CAA (42 U.S.C. 7661) and 40 CFR part 71.

***Plant site*** means all contiguous or adjoining surface property that is under common control, including surface properties that are separated only by a road or other public right-

**of-way. Common control includes surface properties that are owned, leased, or operated by the same entity, parent entity, subsidiary, or any combination.**

***Research and development facility*** means laboratory and pilot plant operations whose primary purpose is to conduct research and development into new processes and products, where the operations are under the close supervision of technically trained personnel, and which are not engaged in the manufacture of products for commercial sale, except in a *de minimis* manner.

***Responsible official*** means responsible official as defined in 40 CFR 70.2 and 40 CFR 71.2, as applicable.

***Safety device*** means a closure device such as a pressure relief valve, frangible disc, fusible plug, or any other type of device that functions exclusively to prevent physical damage or permanent deformation to a unit or its air emission control equipment by venting gases or vapors directly to the atmosphere during unsafe conditions resulting from an unplanned, accidental, or emergency event.

***Shutdown*** means the cessation of operation of an OLD affected source, or portion thereof (other than as part of normal operation of a batch-type operation), including equipment required or used to comply with this subpart, or the emptying and degassing of a storage tank. Shutdown as defined here includes, but is not limited to, events that result from periodic maintenance, replacement of equipment, or repair.

***Startup*** means the setting in operation of an OLD affected source, or portion thereof (other than as part of normal operation of a batch-type operation), for any purpose. Startup also includes the placing in operation of any individual piece of equipment required or used to comply with this subpart including, but not limited to, control devices and monitors.

***Storage tank*** means a stationary unit that is constructed primarily of nonearthen materials (such as wood, concrete, steel, or reinforced plastic) that provide structural support and is designed to hold a bulk quantity of liquid. Storage tanks do not include:

- (1) Units permanently attached to conveyances such as trucks, trailers, rail cars, barges, or ships;
- (2) Pressure vessels designed to operate in excess of 204.9 kilopascals and without emissions to the atmosphere;
- (3) Bottoms receivers;
- (4) Surge control vessels;
- (5) Vessels storing wastewater; or
- (6) Reactor vessels associated with a manufacturing process unit.

***Tank car*** means a car designed to carry liquid freight by rail, and including a permanently attached tank.

***Total actual annual facility-level organic liquid loading volume*** means the total facility-level actual volume of organic liquid loaded for transport within or out of the facility through transfer racks that are part of the affected source into transport vehicles (for existing affected sources) or into transport vehicles and containers (for new affected sources) based on a 3-year rolling average, calculated annually.

(1) For existing affected sources, each 3-year rolling average is based on actual facility-level loading volume during each calendar year (January 1 through December 31) in the 3-year period. For calendar year 2004 only (the first year of the initial 3-year rolling average), if an owner or operator of an affected source does not have actual loading volume data for the time period from January 1, 2004, through February 2, 2004 (the time period prior to the effective date of the OLD NESHAP), the owner or operator shall compute a facility-level loading volume for this time period as follows: At the end of the 2004 calendar year, the

owner or operator shall calculate a daily average facility-level loading volume (based on the actual loading volume for February 3, 2004, through December 31, 2004) and use that daily average to estimate the facility-level loading volume for the period of time from January 1, 2004, through February 2, 2004. The owner or operator shall then sum the estimated facility-level loading volume from January 1, 2004, through February 2, 2004, and the actual facility-level loading volume from February 3, 2004, through December 31, 2004, to calculate the annual facility-level loading volume for calendar year 2004.

(2)(i) For new affected sources, the 3-year rolling average is calculated as an average of three 12-month periods. An owner or operator must select as the beginning calculation date with which to start the calculations as either the initial startup date of the new affected source or the first day of the calendar month following the month in which startup occurs. Once selected, the date with which the calculations begin cannot be changed.

(ii) The initial 3-year rolling average is based on the projected maximum facility-level annual loading volume for each of the 3 years following the selected beginning calculation date. The second 3-year rolling average is based on actual facility-level loading volume for the first year of operation plus a new projected maximum facility-level annual loading volume for second and third years following the selected beginning calculation date. The third 3-year rolling average is based on actual facility-level loading volume for the first 2 years of operation plus a new projected maximum annual facility-level loading volume for the third year following the beginning calculation date. Subsequent 3-year rolling averages are based on actual facility-level loading volume for each year in the 3-year rolling average.

**Transfer rack** means a single system used to load organic liquids into, or unload organic liquids out of, transport vehicles or containers. It includes all loading and unloading arms, pumps, meters, shutoff valves, relief valves, and other piping and equipment necessary for the transfer operation. Transfer equipment and operations that are physically separate (i.e., do not share common piping, valves, and other equipment) are considered to be separate transfer racks.

**Transport vehicle** means a cargo tank or tank car.

**Vapor balancing system** means: (1) A piping system that collects organic HAP vapors displaced from transport vehicles or containers during loading and routes the collected vapors to the storage tank from which the liquid being loaded originated or to another storage tank connected to a common header. For containers, the piping system must route the displaced vapors directly to the appropriate storage tank or to another storage tank connected to a common header in order to qualify as a vapor balancing system; or (2) a piping system that collects organic HAP vapors displaced from the loading of a storage tank and routes the collected vapors to the transport vehicle from which the storage tank is filled.

**Vapor collection system** means any equipment located at the source (i.e., at the OLD operation) that is not open to the atmosphere; that is composed of piping, connections, and, if necessary, flow-inducing devices; and that is used for:

- (1) Containing and conveying vapors displaced during the loading of transport vehicles to a control device;
- (2) Containing and directly conveying vapors displaced during the loading of containers; or
- (3) Vapor balancing. This does not include any of the vapor collection equipment that is installed on the transport vehicle.

**Vapor-tight transport vehicle** means a transport vehicle that has been demonstrated to be vapor-tight. To be considered vapor-tight, a transport vehicle equipped with vapor collection equipment must undergo a pressure change of no more than 250 pascals (1 inch of water) within 5 minutes after it is pressurized to 4,500 pascals (18 inches of water). This capability must be demonstrated annually using the procedures specified in EPA Method 27 of 40 CFR part 60, appendix A. For all other transport vehicles, vapor tightness is demonstrated by performing the U.S. DOT pressure test procedures for tank cars and cargo tanks.

**Work practice standard** means any design, equipment, work practice, or operational standard, or combination thereof, that is promulgated pursuant to section 112(h) of the CAA.

**Table 1 to Subpart EEEE of Part 63—Organic Hazardous Air Pollutants**

You must use the organic HAP information listed in the following table to determine which of the liquids handled at your facility meet the HAP content criteria in the definition of Organic Liquid in §63.2406.

| Compound name                                     | CAS No. <sup>1</sup> |
|---|----------------------|
| 2,4-D salts and esters                            | 94-75-7              |
| Acetaldehyde                                      | 75-07-0              |
| Acetonitrile                                      | 75-05-8              |
| Acetophenone                                      | 98-86-2              |
| Acrolein  | 107-02-8             |
| Acrylamide  | 79-06-1              |
| Acrylic acid                                      | 79-10-7              |
| Acrylonitrile                                     | 107-13-1             |
| Allyl chloride                                    | 107-05-1             |
| Aniline   | 62-53-3              |
| Benzene   | 71-43-2              |
| Biphenyl  | 92-52-4              |
| Butadiene (1,3-)                                  | 106-99-0             |
| Carbon tetrachloride                              | 56-23-5              |
| Chloroacetic acid                                 | 79-11-8              |
| Chlorobenzene                                     | 108-90-7             |
| 2-Chloro-1,3-butadiene (Chloroprene)              | 126-99-8             |
| Chloroform  | 67-66-3              |
| m-Cresol  | 108-39-4             |
| o-Cresol  | 95-48-7              |
| p-Cresol  | 106-44-5             |
| Cresols/cresylic acid                             | 1319-77-3            |
| Cumene  | 98-82-8              |
| Dibenzofurans                                     | 132-64-9             |
| Dibutylphthalate                                  | 84-74-2              |
| Dichloroethane (1,2-) (Ethylene dichloride) (EDC) | 107-06-2             |

| Compound name                               | CAS No. <sup>1</sup> |
|---|----------------------|
| Dichloropropene (1,3-)                      | 542-75-6             |
| Diethanolamine                              | 111-42-2             |
| Diethyl aniline (N,N-)                      | 121-69-7             |
| Diethylene glycol monobutyl ether           | 112-34-5             |
| Diethylene glycol monomethyl ether          | 111-77-3             |
| Diethyl sulfate                             | 64-67-5              |
| Dimethyl formamide                          | 68-12-2              |
| Dimethylhydrazine (1,1-)                    | 57-14-7              |
| Dioxane (1,4-) (1,4-Diethyleneoxide)        | 123-91-1             |
| Epichlorohydrin (1-Chloro-2,3-epoxypropane) | 106-89-8             |
| Epoxybutane (1,2-)                          | 106-88-7             |
| Ethyl acrylate                              | 140-88-5             |
| Ethylbenzene                                | 100-41-4             |
| Ethyl chloride (Chloroethane)               | 75-00-3              |
| Ethylene dibromide (Dibromomethane)         | 106-93-4             |
| Ethylene glycol                             | 107-21-1             |
| Ethylene glycol dimethyl ether              | 110-71-4             |
| Ethylene glycol monomethyl ether            | 109-86-4             |
| Ethylene glycol monomethyl ether acetate    | 110-49-6             |
| Ethylene glycol monophenyl ether            | 122-99-6             |
| Ethylene oxide                              | 75-21-8              |
| Ethylidene dichloride (1,1-Dichloroethane)  | 75-34-3              |
| Formaldehyde                                | 50-00-0              |
| Hexachloroethane                            | 67-72-1              |
| Hexane                                      | 110-54-3             |
| Hydroquinone                                | 123-31-9             |
| Isophorone                                  | 78-59-1              |
| Maleic anhydride                            | 108-31-6             |
| Methanol                                    | 67-56-1              |
| Methyl chloride (Chloromethane)             | 74-87-3              |
| Methylene chloride (Dichloromethane)        | 75-09-2              |
| Methylenedianiline (4,4'-)                  | 101-77-9             |
| Methylene diphenyl diisocyanate             | 101-68-8             |

| Compound name                                | CAS No. <sup>1</sup> |
|--|----------------------|
| Methyl hydrazine                             | 60-34-4              |
| Methyl isobutyl ketone (Hexone) (MIBK)       | 108-10-1             |
| Methyl methacrylate                          | 80-62-6              |
| Methyl tert-butyl ether (MTBE)               | 1634-04-4            |
| Naphthalene                                  | 91-20-3              |
| Nitrobenzene                                 | 98-95-3              |
| Phenol                                       | 108-9-52             |
| Phthalic anhydride                           | 85-44-9              |
| Polycyclic organic matter                    | 50-32-8              |
| Propionaldehyde                              | 123-38-6             |
| Propylene dichloride (1,2-Dichloropropane)   | 78-87-5              |
| Propylene oxide                              | 75-56-9              |
| Quinoline                                    | 91-22-5              |
| Styrene                                      | 100-42-5             |
| Styrene oxide                                | 96-09-3              |
| Tetrachloroethane (1,1,2,2-)                 | 79-34-5              |
| Tetrachloroethylene (Perchloroethylene)      | 127-18-4             |
| Toluene                                      | 108-88-3             |
| Toluene diisocyanate (2,4-)                  | 584-84-9             |
| o-Toluidine                                  | 95-53-4              |
| Trichlorobenzene (1,2,4-)                    | 120-82-1             |
| Trichloroethane (1,1,1-) (Methyl chloroform) | 71-55-6              |
| Trichloroethane (1,1,2-) (Vinyl trichloride) | 79-00-5              |
| Trichloroethylene                            | 79-01-6              |
| Triethylamine                                | 121-44-8             |
| Trimethylpentane (2,2,4-)                    | 540-84-1             |
| Vinyl acetate                                | 108-05-4             |
| Vinyl chloride (Chloroethylene)              | 75-01-4              |
| Vinylidene chloride (1,1-Dichloroethylene)   | 75-35-4              |
| Xylene (m-)                                  | 108-38-3             |
| Xylene (o-)                                  | 95-47-6              |
| Xylene (p-)                                  | 106-42-3             |
| Xylenes (isomers and mixtures)               | 1330-20-7            |

<sup>1</sup>CAS numbers refer to the Chemical Abstracts Services registry number assigned to specific compounds, isomers, or mixtures of compounds.

**Table 12 to Subpart EEEE of Part 63—Applicability of General Provisions to Subpart EEEE**

**As stated in §§63.2382 and 63.2398, you must comply with the applicable General Provisions requirements as follows:**

| <b>Citation</b> | <b>Subject</b>  | <b>Brief description</b>   | <b>Applies to subpart EEEE</b> |
|-----------------|---|--|--------------------------------|
| §63.1           | Applicability   | Initial applicability determination; Applicability after standard established; Permit requirements; Extensions, Notifications  | Yes.                           |
| §63.2           | Definitions   | Definitions for part 63 standards  | Yes.                           |
| §63.3           | Units and Abbreviations   | Units and abbreviations for part 63 standards  | Yes.                           |
| §63.4           | Prohibited Activities and Circumvention                                   | Prohibited activities; Circumvention, Severability   | Yes.                           |
| §63.5           | Construction/Reconstruction   | Applicability; Applications; Approvals   | Yes.                           |
| §63.6(a)        | Compliance with Standards/O&M Applicability                               | GP apply unless compliance extension; GP apply to area sources that become major   | Yes.                           |
| §63.6(b)(1)–(4) | Compliance Dates for New and Reconstructed Sources                        | Standards apply at effective date; 3 years after effective date; upon startup; 10 years after construction or reconstruction commences for section 112(f)                      | Yes.                           |
| §63.6(b)(5)     | Notification  | Must notify if commenced construction or reconstruction after proposal   | Yes.                           |
| §63.6(b)(6)     | [Reserved].   |  |                                |
| §63.6(b)(7)     | Compliance Dates for New and Reconstructed Area Sources That Become Major | Area sources that become major must comply with major source standards immediately upon becoming major, regardless of whether required to comply when they were an area source | Yes.                           |

| Citation        | Subject  | Brief description   | Applies to subpart EEEE  |
|-----------------|--|---|--|
| §63.6(c)(1)–(2) | Compliance Dates for Existing Sources                        | Comply according to date in this subpart, which must be no later than 3 years after effective date; for section 112(f) standards, comply within 90 days of effective date unless compliance extension   | Yes.   |
| §63.6(c)(3)–(4) | [Reserved].  |   |  |
| §63.6(c)(5)     | Compliance Dates for Existing Area Sources That Become Major | Area sources that become major must comply with major source standards by date indicated in this subpart or by equivalent time period (e.g., 3 years)   | Yes.   |
| §63.6(d)        | [Reserved].  |   |  |
| §63.6(e)(1)     | Operation & Maintenance                                      | Operate to minimize emissions at all times; correct malfunctions as soon as practicable; and operation and maintenance requirements independently enforceable; information Administrator will use to determine if operation and maintenance requirements were met | Yes.   |
| §63.6(e)(2)     | [Reserved].  |   |  |
| §63.6(e)(3)     | SSM Plan   | Requirement for SSM plan; content of SSM plan; actions during SSM   | Yes; however, (1) the 2-day reporting requirement in paragraph §63.6(e)(3)(iv) does not apply and (2) §63.6(e)(3) does not apply to emissions sources not requiring control. |
| §63.6(f)(1)     | Compliance Except During SSM                                 | You must comply with emission standards at all times except during SSM  | Yes.   |
| §63.6(f)(2)–(3) | Methods for Determining Compliance                           | Compliance based on performance test, operation and maintenance plans, records, inspection  | Yes.   |
| §63.6(g)(1)–(3) | Alternative Standard   | Procedures for getting an alternative standard  | Yes.   |

| Citation         | Subject                                     | Brief description  | Applies to subpart EEEE  |
|------------------|---|--|--|
| §63.6(h)         | Opacity/Visible Emission Standards          | Requirements for compliance with opacity and visible emission standards  | No; except as it applies to flares for which Method 22 observations are required as part of a flare compliance assessment. |
| §63.6(i)(1)–(14) | Compliance Extension                        | Procedures and criteria for Administrator to grant compliance extension  | Yes.   |
| §63.6(j)         | Presidential Compliance Exemption           | President may exempt any source from requirement to comply with this subpart   | Yes.   |
| §63.7(a)(2)      | Performance Test Dates                      | Dates for conducting initial performance testing; must conduct 180 days after compliance date  | Yes.   |
| §63.7(a)(3)      | Section 114 Authority                       | Administrator may require a performance test under CAA section 114 at any time   | Yes.   |
| §63.7(b)(1)      | Notification of Performance Test            | Must notify Administrator 60 days before the test  | Yes.   |
| §63.7(b)(2)      | Notification of Rescheduling                | If you have to reschedule performance test, must notify Administrator of rescheduled date as soon as practicable and without delay   | Yes.   |
| §63.7(c)         | Quality Assurance (QA)/Test Plan            | Requirement to submit site-specific test plan 60 days before the test or on date Administrator agrees with; test plan approval procedures; performance audit requirements; internal and external QA procedures for testing | Yes.   |
| §63.7(d)         | Testing Facilities                          | Requirements for testing facilities  | Yes.   |
| §63.7(e)(1)      | Conditions for Conducting Performance Tests | Performance tests must be conducted under representative conditions; cannot conduct performance tests during SSM   | Yes.   |
| §63.7(e)(2)      | Conditions for Conducting Performance Tests | Must conduct according to this subpart and EPA test methods unless Administrator approves alternative  | Yes.   |

| Citation    | Subject                                  | Brief description   | Applies to subpart EEEE  |
|-------------|--|---|--|
| §63.7(e)(3) | Test Run Duration                        | Must have three test runs of at least 1 hour each; compliance is based on arithmetic mean of three runs; conditions when data from an additional test run can be used           | Yes; however, for transfer racks per §§63.987(b)(3)(i)(A)–(B) and 63.997(e)(1)(v)(A)–(B) provide exceptions to the requirement for test runs to be at least 1 hour each. |
| §63.7(f)    | Alternative Test Method                  | Procedures by which Administrator can grant approval to use an intermediate or major change, or alternative to a test method  | Yes.   |
| §63.7(g)    | Performance Test Data Analysis           | Must include raw data in performance test report; must submit performance test data 60 days after end of test with the Notification of Compliance Status; keep data for 5 years | Yes; however, performance test data is to be submitted with the Notification of Compliance Status according to the schedule specified in §63.9(h)(1)–(6) below.          |
| §63.7(h)    | Waiver of Tests                          | Procedures for Administrator to waive performance test  | Yes.   |
| §63.8(a)(1) | Applicability of Monitoring Requirements | Subject to all monitoring requirements in standard  | Yes.   |
| §63.8(a)(2) | Performance Specifications               | Performance Specifications in appendix B of 40 CFR part 60 apply  | Yes.   |
| §63.8(a)(3) | [Reserved].                              |   |  |
| §63.8(a)(4) | Monitoring of Flares                     | Monitoring requirements for flares in §63.11  | Yes; however, monitoring requirements in §63.987(c) also apply.  |
| §63.8(b)(1) | Monitoring                               | Must conduct monitoring according to standard unless Administrator approves alternative   | Yes.   |

| Citation             | Subject  | Brief description  | Applies to subpart EEEE                |
|----------------------|--|--|--|
| §63.8(b)(2)–(3)      | Multiple Effluents and Multiple Monitoring Systems | Specific requirements for installing monitoring systems; must install on each affected source or after combined with another affected source before it is released to the atmosphere provided the monitoring is sufficient to demonstrate compliance with the standard; if more than one monitoring system on an emission point, must report all monitoring system results, unless one monitoring system is a backup | Yes.                                   |
| §63.8(c)(1)          | Monitoring System Operation and Maintenance        | Maintain monitoring system in a manner consistent with good air pollution control practices  | Yes.                                   |
| §63.8(c)(1)(i)–(iii) | Routine and Predictable SSM                        | Keep parts for routine repairs readily available; reporting requirements for SSM when action is described in SSM plan.   | Yes.                                   |
| §63.8(c)(2)–(3)      | Monitoring System Installation                     | Must install to get representative emission or parameter measurements; must verify operational status before or at performance test  | Yes.                                   |
| §63.8(c)(4)          | CMS Requirements                                   | CMS must be operating except during breakdown, out-of control, repair, maintenance, and high-level calibration drifts; COMS must have a minimum of one cycle of sampling and analysis for each successive 10-second period and one cycle of data recording for each successive 6-minute period; CEMS must have a minimum of one cycle of operation for each successive 15-minute period                              | Yes; however, COMS are not applicable. |
| §63.8(c)(5)          | COMS Minimum Procedures                            | COMS minimum procedures  | No.                                    |

| Citation                 | Subject                               | Brief description   | Applies to subpart EEEE  |
|--------------------------|---------------------------------------|---|--|
| §63.8(c)(6)–(8)          | CMS Requirements                      | Zero and high level calibration check requirements. Out-of-control periods  | Yes, but only applies for CEMS. 40 CFR part 63, subpart SS provides requirements for CPMS. |
| §63.8(d)                 | CMS Quality Control                   | Requirements for CMS quality control, including calibration, etc.; must keep quality control plan on record for 5 years; keep old versions for 5 years after revisions  | Yes, but only applies for CEMS. 40 CFR part 63, subpart SS provides requirements for CPMS. |
| §63.8(e)                 | CMS Performance Evaluation            | Notification, performance evaluation test plan, reports   | Yes, but only applies for CEMS.  |
| §63.8(f)(1)–(5)          | Alternative Monitoring Method         | Procedures for Administrator to approve alternative monitoring  | Yes, but 40 CFR part 63, subpart SS also provides procedures for approval of CPMS.         |
| §63.8(f)(6)              | Alternative to Relative Accuracy Test | Procedures for Administrator to approve alternative relative accuracy tests for CEMS  | Yes.   |
| §63.8(g)                 | Data Reduction                        | COMS 6-minute averages calculated over at least 36 evenly spaced data points; CEMS 1 hour averages computed over at least 4 equally spaced data points; data that cannot be used in average                       | Yes; however, COMS are not applicable.   |
| §63.9(a)                 | Notification Requirements             | Applicability and State delegation  | Yes.   |
| §63.9(b)(1)–(2), (4)–(5) | Initial Notifications                 | Submit notification within 120 days after effective date; notification of intent to construct/reconstruct, notification of commencement of construction/reconstruction, notification of startup; contents of each | Yes.   |
| §63.9(c)                 | Request for Compliance Extension      | Can request if cannot comply by date or if installed best available control technology or lowest achievable emission rate (BACT/LAER)   | Yes.   |

| Citation        | Subject   | Brief description  | Applies to subpart EEEE  |
|-----------------|---|--|--|
| §63.9(d)        | Notification of Special Compliance Requirements for New Sources | For sources that commence construction between proposal and promulgation and want to comply 3 years after effective date   | Yes.   |
| §63.9(e)        | Notification of Performance Test                                | Notify Administrator 60 days prior   | Yes.   |
| §63.9(f)        | Notification of VE/Opacity Test                                 | Notify Administrator 30 days prior   | No.  |
| §63.9(g)        | Additional Notifications When Using CMS                         | Notification of performance evaluation; notification about use of COMS data; notification that exceeded criterion for relative accuracy alternative  | Yes; however, there are no opacity standards.  |
| §63.9(h)(1)–(6) | Notification of Compliance Status                               | Contents due 60 days after end of performance test or other compliance demonstration, except for opacity/visible emissions, which are due 30 days after; when to submit to Federal vs. State authority | Yes; however, (1) there are no opacity standards and (2) all initial Notification of Compliance Status, including all performance test data, are to be submitted at the same time, either within 240 days after the compliance date or within 60 days after the last performance test demonstrating compliance has been completed, whichever occurs first. |
| §63.9(i)        | Adjustment of Submittal Deadlines                               | Procedures for Administrator to approve change in when notifications must be submitted   | Yes.   |
| §63.9(j)        | Change in Previous Information                                  | Must submit within 15 days after the change  | No. These changes will be reported in the first and subsequent compliance reports.   |
| §63.10(a)       | Recordkeeping/Reporting   | Applies to all, unless compliance extension; when to submit to Federal vs. State authority; procedures for owners of more than one source  | Yes.   |

| Citation              | Subject   | Brief description  | Applies to subpart EEEE                |
|-----------------------|---|--|--|
| §63.10(b)(1)          | Recordkeeping/Reporting                               | General requirements; keep all records readily available; keep for 5 years   | Yes.                                   |
| §63.10(b)(2)(i)–(iv)  | Records Related to Startup, Shutdown, and Malfunction | Occurrence of each for operations (process equipment); occurrence of each malfunction of air pollution control equipment; maintenance on air pollution control equipment; actions during SSM | Yes.                                   |
| §63.10(b)(2)(vi)–(xi) | CMS Records   | Malfunctions, inoperative, out-of-control periods  | Yes.                                   |
| §63.10(b)(2)(xii)     | Records   | Records when under waiver  | Yes.                                   |
| §63.10(b)(2)(xiii)    | Records   | Records when using alternative to relative accuracy test   | Yes.                                   |
| §63.10(b)(2)(xiv)     | Records   | All documentation supporting initial notification and notification of compliance status  | Yes.                                   |
| §63.10(b)(3)          | Records   | Applicability determinations   | Yes.                                   |
| §63.10(c)             | Records   | Additional records for CMS   | Yes.                                   |
| §63.10(d)(1)          | General Reporting Requirements                        | Requirement to report  | Yes.                                   |
| §63.10(d)(2)          | Report of Performance Test Results                    | When to submit to Federal or State authority   | Yes.                                   |
| §63.10(d)(3)          | Reporting Opacity or VE Observations                  | What to report and when  | Yes.                                   |
| §63.10(d)(4)          | Progress Reports                                      | Must submit progress reports on schedule if under compliance extension   | Yes.                                   |
| §63.10(d)(5)          | SSM Reports   | Contents and submission  | Yes.                                   |
| §63.10(e)(1)–(2)      | Additional CMS Reports                                | Must report results for each CEMS on a unit; written copy of CMS performance evaluation; 2–3 copies of COMS performance evaluation   | Yes; however, COMS are not applicable. |

| Citation                | Subject                                    | Brief description   | Applies to subpart EEEE  |
|-------------------------|--|---|--|
| §63.10(e)(3)(i)–(iii)   | Reports                                    | Schedule for reporting excess emissions and parameter monitor exceedance (now defined as deviations)  | Yes; however, note that the title of the report is the compliance report; deviations include excess emissions and parameter exceedances. |
| §63.10(e)(3)(iv)–(v)    | Excess Emissions Reports                   | Requirement to revert to quarterly submission if there is an excess emissions or parameter monitoring exceedance (now defined as deviations); provision to request semiannual reporting after compliance for 1 year; submit report by 30th day following end of quarter or calendar half; if there has not been an exceedance or excess emissions (now defined as deviations), report contents in a statement that there have been no deviations; must submit report containing all of the information in §§63.8(c)(7)–(8) and 63.10(c)(5)–(13) | Yes.   |
| §63.10(e)(3)(vi)–(viii) | Excess Emissions Report and Summary Report | Requirements for reporting excess emissions for CMS (now called deviations); requires all of the information in §§63.10(c)(5)–(13) and 63.8(c)(7)–(8)   | Yes.   |
| §63.10(e)(4)            | Reporting COMS Data                        | Must submit COMS data with performance test data  | No.  |
| §63.10(f)               | Waiver for Recordkeeping/Reporting         | Procedures for Administrator to waive   | Yes.   |
| §63.11(b)               | Flares                                     | Requirements for flares   | Yes; §63.987 requirements apply, and the section references §63.11(b).   |
| §63.12                  | Delegation                                 | State authority to enforce standards  | Yes.   |
| §63.13                  | Addresses                                  | Addresses where reports, notifications, and requests are sent   | Yes.   |

| Citation | Subject                     | Brief description                      | Applies to subpart EEEE |
|----------|-----------------------------|--|-------------------------|
| §63.14   | Incorporation by Reference  | Test methods incorporated by reference | Yes.                    |
| §63.15   | Availability of Information | Public and confidential information    | Yes.                    |

**E.2.3 One Time Deadlines Relating to National Emission Standards for Hazardous Air Pollutants for Organic Liquids Distribution (Non-Gasoline) [40 CFR Part 63, Subpart EEEE]**

The Permittee shall comply with the following requirements by the dates listed:

| Requirement          | Rule Cite            | Affected Facility                      | Deadline   |
|----------------------|----------------------|--|--|
| Initial Notification | 40 CFR 63.2382(b)(1) | two (2) fixed roof resin storage tanks | no later than 120 calendar days after February 3, 2004 |

19. The Quarterly Report forms have been deleted, added or revised as shown on the following pages.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF AIR QUALITY  
 COMPLIANCE DATA SECTION**

**Part 70 Quarterly Report**

Source Name: ~~INTAT Precision, Inc.~~  
 Source Address: ~~2148 State Road 3 North, Rushville, Indiana 46173~~  
 Mailing Address: ~~P.O. Box 488, Rushville, Indiana 46173~~  
 Part 70 Permit No.: ~~T139-17898-00011~~  
 Facility: ~~core machines P4, P5, P6~~  
 Parameter: ~~VOC emissions~~  
 Limit: ~~The total resin usage for core machines P4, P5, and P6, all constructed in 1988, shall not exceed 263,150 pounds of resin per 12 consecutive month period. The total amine gas catalyst usage for core machines P4, P5, and P6 shall not exceed 36,841 pounds of amine gas catalyst per 12 consecutive month period.~~

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

| Month   | Core Machine ID       | Column 1                     |   | Column 2                                 |   | Column 1 + Column 2              |   |
|---------|-----------------------|------------------------------|---|--|---|----------------------------------|---|
|         |                       | Resin Usage This Month (lbs) | Amine gas Catalyst Usage This Month (lbs) | Resin Usage for Previous 11 Months (lbs) | Amine gas Catalyst Usage for Previous 11 Months (lbs) | 12 Month Total Resin Usage (lbs) | 12 Month Total Amine gas Catalyst Usage (lbs) |
| Month 1 | <del>P4, P5, P6</del> |                              |   |  |   |                                  |   |
| Month 2 | <del>P4, P5, P6</del> |                              |   |  |   |                                  |   |
| Month 3 |                       |                              |   |  |   |                                  |   |

~~No deviation occurred in this quarter.~~

~~Deviation/s occurred in this quarter.~~

~~Deviation has been reported on:~~

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

Attach a signed certification to complete this report.



| Month   | Facility ID | Column 1                           | Column 2                                       | Column 1 + Column 2                    |
|---------|-------------|------------------------------------|--|--|
|         |             | Metal Throughput This Month (tons) | Metal Throughput for Previous 11 Months (tons) | 12 Month Total Metal Throughput (tons) |
| Month 3 | P8, P9      |                                    |  |  |
|         | P10, P11 P9 |                                    |  |  |
|         | P13A        |                                    |  |  |
|         | P14A        |                                    |  |  |
|         | P16A        |                                    |  |  |
|         | P17A - P22A |                                    |  |  |
|         | P26 & P27   |                                    |  |  |
|         | P29 & P30   |                                    |  |  |

No deviation occurred in this quarter.

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

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

Attach a signed certification to complete this report.

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

### Part 70 Quarterly Report

Source Name: INTAT Precision, Inc.  
 Source Address: 2148 State Road 3 North, Rushville, Indiana 46173  
 Mailing Address: P.O. Box 488, Rushville, Indiana 46173  
 Part 70 Permit No.: T139-478987531-00011  
 Facility: **Plant 1, Casting** Line 2 of ~~two (2)~~ gray and ductile iron foundry lines constructed in 1988  
 Parameter: ~~PM and PM10 emissions and VOC emissions~~  
 Limit: The throughput of metal to each of the following facilities shall not exceed ~~61,500~~ **79,000** tons per twelve (12) consecutive month period: melting (P8, ~~P9~~), ladle (~~P10~~), inoculation (P11), pouring (P13B), cooling (P14B), shakeout (P16B), **casting conveying and desprue** (P17B -P22B), **and** shotblasting (P40 - P42) **and** grinding (~~P29 -P30~~).

QUARTER :

YEAR:

| Month   | Facility ID          | Column 1                           | Column 2                                       | Column 1 + Column 2                    |
|---------|----------------------|------------------------------------|--|--|
|         |                      | Metal Throughput This Month (tons) | Metal Throughput for Previous 11 Months (tons) | 12 Month Total Metal Throughput (tons) |
| Month 1 | <del>P8, P9</del>    |                                    |  |  |
|         | <del>P10, P11</del>  |                                    |  |  |
|         | P13B                 |                                    |  |  |
|         | P14B                 |                                    |  |  |
|         | P16B                 |                                    |  |  |
|         | P17B - P22B          |                                    |  |  |
|         | P40 - P42            |                                    |  |  |
|         | <del>P29 - P30</del> |                                    |  |  |
| Month 2 | <del>P8, P9</del>    |                                    |  |  |
|         | <del>P10, P11</del>  |                                    |  |  |
|         | P13B                 |                                    |  |  |
|         | P14B                 |                                    |  |  |
|         | P16B                 |                                    |  |  |
|         | P17B - P22B          |                                    |  |  |
|         | P40 - P42            |                                    |  |  |
|         | <del>P29 - P30</del> |                                    |  |  |

This Quarterly Report form consists of two (2) pages.

**This Quarterly Report form consists of two (2) pages.**

| Month   | Facility ID | Column 1                           | Column 2                                       | Column 1 + Column 2                    |
|---------|-------------|------------------------------------|--|--|
|         |             | Metal Throughput This Month (tons) | Metal Throughput for Previous 11 Months (tons) | 12 Month Total Metal Throughput (tons) |
| Month 3 | P8, P9      |                                    |  |  |
|         | P10, P11    |                                    |  |  |
|         | P13B        |                                    |  |  |
|         | P14B        |                                    |  |  |
|         | P16B        |                                    |  |  |
|         | P17B - P22B |                                    |  |  |
|         | P40 - P42   |                                    |  |  |
|         | P29 - P30   |                                    |  |  |

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

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

Attach a signed certification to complete this report.

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

### Part 70 Quarterly Report

**Source Name:** INTAT Precision, Inc.  
**Source Address:** 2148 State Road 3 North, Rushville, Indiana 46173  
**Mailing Address:** P.O. Box 488, Rushville, Indiana 46173  
**Part 70 Permit No.:** T139-7531-00011  
**Facility:** Pouring, Cooling and Shakeout operations of Plant 1, Casting Line 2 of gray and ductile iron foundry line constructed in 1988  
**Parameter:** VOC emissions  
**Limit:** The throughput of metal to the pouring, cooling and shakeout operations (P13B, P14B, and P16B) and bad heat shakeout (BHS) operations combined shall not exceed 79,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

**QUARTER :** \_\_\_\_\_ **YEAR:** \_\_\_\_\_

| Month | Facility ID | Column 1                           | Column 2                                       | Column 1 + Column 2                    |
|-------|-------------|------------------------------------|--|--|
|       |             | Metal Throughput This Month (tons) | Metal Throughput for Previous 11 Months (tons) | 12 Month Total Metal Throughput (tons) |
|       | P13B        |                                    |  |  |
|       | P14B        |                                    |  |  |
|       | P16B        |                                    |  |  |
|       | BHS         |                                    |  |  |
|       | P13B        |                                    |  |  |
|       | P14B        |                                    |  |  |
|       | P16B        |                                    |  |  |
|       | BHS         |                                    |  |  |
|       | P13B        |                                    |  |  |
|       | P14B        |                                    |  |  |
|       | P16B        |                                    |  |  |
|       | BHS         |                                    |  |  |

No deviation occurred in this quarter.

Deviation/s occurred in this quarter.

Deviation has been reported on:

Submitted by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE DATA SECTION**

**Part 70 Quarterly Report**

Source Name: ~~INTAT Precision Inc.~~  
Source Address: ~~State Road 3 North, Rushville, Indiana 46173~~  
Mailing Address: ~~P.O. Box 488, Rushville, Indiana 46173~~  
Part 70 Permit No.: ~~T139-17898-00011~~  
Facility: ~~Line 2 of two (2) gray iron foundry lines constructed in 1988~~  
Parameter: ~~PM and PM10 emissions and VOC emissions~~  
Limit: ~~The throughput of metal to Plant 1, Line 2 shall not exceed 5,125 tons per month during the first 12 months of operation.~~

YEAR:

| <del>—Month</del> | <del>Metal throughput this month (tons)</del> |
|-------------------|---|
| <del>1</del>      |   |
| <del>2</del>      |   |
| <del>3</del>      |   |

~~9~~ ~~No deviation occurred in this quarter.~~

~~9~~ ~~Deviation/s occurred in this quarter.~~

~~Deviation has been reported on:~~

~~Submitted by: \_\_\_\_\_~~

~~Title / Position: \_\_\_\_\_~~

~~Signature: \_\_\_\_\_~~

~~Date: \_\_\_\_\_~~

~~Phone: \_\_\_\_\_~~

~~Attach a signed certification to complete this report.~~

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF AIR QUALITY  
 COMPLIANCE DATA SECTION**

**Part 70 Quarterly Report**

Source Name: \_\_\_\_\_ INTAT Precision Inc.  
 Source Address: \_\_\_\_\_ State Road 3 North, Rushville, Indiana 46173  
 Mailing Address: \_\_\_\_\_ P.O. Box 488, Rushville, Indiana 46173  
 Part 70 Permit No.: \_\_\_\_\_ T139-17898-00011  
 Facility: \_\_\_\_\_ Two (2) gray iron foundry lines constructed in 1988  
 Parameter: \_\_\_\_\_ PM and PM10 emissions  
 Limit: \_\_\_\_\_ The throughput of sand to the sand handling operation (P32A&B P37A&B, P39A&B) shall not exceed 777,600 tons per twelve (12) consecutive month period

YEAR:

| Month | Column 1                          | Column 2                                      | Column 1 + Column 2                   |
|-------|-----------------------------------|---|---------------------------------------|
|       | Sand Throughput This Month (tons) | Sand Throughput for Previous 11 Months (tons) | 12 Month Total Sand Throughput (tons) |
|       |                                   |   |                                       |
|       |                                   |   |                                       |
|       |                                   |   |                                       |

\_\_\_\_\_ 9 \_\_\_\_\_ No deviation occurred in this quarter.

\_\_\_\_\_ 9 \_\_\_\_\_ Deviation/s occurred in this quarter.

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

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

Attach a signed certification to complete this report.

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

### Part 70 Quarterly Report

Source Name: INTAT Precision Inc.  
 Source Address: State Road 3 North, Rushville, Indiana 46173  
 Mailing Address: P.O. Box 488, Rushville, Indiana 46173  
 Part 70 Permit No.: T139-~~17898~~**7531**-00011  
 Facility: ~~One (1) gray iron foundry line~~ **Casting Line 2** constructed in 2004, ~~Plant 1, Line 2~~  
 Parameter: PM and PM10 emissions  
 Limit: The throughput of sand to the sand handling operation (P32B- P37B, P39B) shall not exceed ~~215,230~~ **368,667** tons per twelve (12) consecutive month period.

YEAR:

| Month | Column 1                          | Column 2                                      | Column 1 + Column 2                   |
|-------|-----------------------------------|---|---------------------------------------|
|       | Sand Throughput This Month (tons) | Sand Throughput for Previous 11 Months (tons) | 12 Month Total Sand Throughput (tons) |
|       |                                   |   |                                       |
|       |                                   |   |                                       |
|       |                                   |   |                                       |

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

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

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE DATA SECTION**

**Part 70 Quarterly Report**

Source Name: ~~INTAT Precision Inc.~~  
Source Address: ~~State Road 3 North, Rushville, Indiana 46173~~  
Mailing Address: ~~P.O. Box 488, Rushville, Indiana 46173~~  
Part 70 Permit No.: ~~T139-17898-00011~~  
Facility: ~~Line 2 of two (2) gray iron foundry lines constructed in 1988~~  
Parameter: ~~PM and PM10 emissions and VOC emissions~~  
Limit: ~~The throughput of sand to Plant 1, Line 2 shall not exceed 17,935 tons per month during the first 12 months of operation.~~

YEAR:

| <del>—Month</del> | <del>Sand throughput this month (tons)</del> |
|-------------------|--|
| <del>1</del>      |  |
| <del>2</del>      |  |
| <del>3</del>      |  |

~~9~~ ~~No deviation occurred in this quarter.~~

~~9~~ ~~Deviation/s occurred in this quarter.~~

~~Deviation has been reported on:~~

~~Submitted by: \_\_\_\_\_~~

~~Title / Position: \_\_\_\_\_~~

~~Signature: \_\_\_\_\_~~

~~Date: \_\_\_\_\_~~

~~Phone: \_\_\_\_\_~~

~~Attach a signed certification to complete this report.~~

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

### Part 70 Quarterly Report

Source Name: INTAT Precision Inc.  
 Source Address: State Road 3 North, Rushville, Indiana 46173  
 Mailing Address: P.O. Box 488, Rushville, Indiana 46173  
 Part 70 Permit No.: T139-478987531-00011  
 Facility: ~~one (1) gray~~ **Plant 2, ductile** iron foundry line constructed in 1997, ~~Plant 2~~  
 Parameter: ~~PM<sub>7</sub> and PM<sub>10</sub>, and manganese emissions and VOC and CO emissions~~  
 Limit: (a) The throughput of metal to each of the following facilities shall not exceed ~~70,000~~ **61,500** tons per twelve (12) consecutive month period: ~~melting, and pouring and inoculation (1000 1110, 2000, and 1150), holding furnace, mold/casting cooling and conveyor system (2000 2015 and 2020), and casting shakeout (3000 3010), Pre-Blast (3055) and Final Blast (3090).~~  
 (b) The throughput of metal to each of the ~~pouring (1000), cooling (2000), and shakeout operations (3000)~~ **pouring operation (2000), the casting cooling and conveyor system (2015 and 2020), and the casting shakeout system (3010)** shall not exceed 61,500 tons per twelve (12) consecutive month period.

QUARTER :

YEAR:

| Month | Facility ID                    | Column 1                           | Column 2                                       | Column 1 + Column 2                    |
|-------|--------------------------------|------------------------------------|--|--|
|       |                                | Metal Throughput This Month (tons) | Metal Throughput for Previous 11 Months (tons) | 12 Month Total Metal Throughput (tons) |
|       | <del>1000A</del>               |                                    |  |  |
|       | <del>Melting (1000 1110)</del> |                                    |  |  |
|       | <del>Inoculation (1150)</del>  |                                    |  |  |
|       | <del>Pouring (1000 2000)</del> |                                    |  |  |
|       | <del>Holding Furnace</del>     |                                    |  |  |
|       | <del>2000 2015 and 2020</del>  |                                    |  |  |
|       | <del>3000 3010</del>           |                                    |  |  |
|       | <del>Pre-Blast (3055)</del>    |                                    |  |  |
|       | <del>Final Blast (3090)</del>  |                                    |  |  |

This Quarterly Report form consists of two (2) pages.

**This Quarterly Report form consists of two (2) pages.**

| Month | Facility ID         | Column 1                           | Column 2                                       | Column 1 + Column 2                    |
|-------|---------------------|------------------------------------|--|--|
|       |                     | Metal Throughput This Month (tons) | Metal Throughput for Previous 11 Months (tons) | 12 Month Total Metal Throughput (tons) |
|       | 4000A               |                                    |  |  |
|       | Melting (4000 1110) |                                    |  |  |
|       | Inoculation (1150)  |                                    |  |  |
|       | Pouring (4000 2000) |                                    |  |  |
|       | Holding Furnace     |                                    |  |  |
|       | 2000 2015 and 2020  |                                    |  |  |
|       | 3000 3010           |                                    |  |  |
|       | Pre-Blast (3055)    |                                    |  |  |
|       | Final Blast (3090)  |                                    |  |  |
|       | 4000A               |                                    |  |  |
|       | Melting (4000 1110) |                                    |  |  |
|       | Inoculation (1150)  |                                    |  |  |
|       | Pouring (4000 2000) |                                    |  |  |
|       | Holding Furnace     |                                    |  |  |
|       | 2000 2015 and 2020  |                                    |  |  |
|       | 3000 3010           |                                    |  |  |
|       | Pre-Blast (3055)    |                                    |  |  |
|       | Final Blast (3090)  |                                    |  |  |

9 No deviation occurred in this quarter.

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

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

Attach a signed certification to complete this report.

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

### Part 70 Quarterly Report

Source Name: INTAT Precision Inc.  
 Source Address: State Road 3 North, Rushville, Indiana 46173  
 Mailing Address: P.O. Box 488, Rushville, Indiana 46173  
 Part 70 Permit No.: T139-~~17898~~**7531**-00011  
 Facility: ~~one (1) gray~~ **Plant 2, ductile** iron foundry line constructed in 1997  
 Parameter: PM and PM10 emissions  
 Limit: The throughput of sand to the sand & waste sand handling operation (4000, **4140, and 5000**) shall not exceed ~~490,000~~ **430,500** tons per twelve (12) consecutive month period.

**QUARTER :**

**YEAR:**

| Month | Column 1                                       | Column 2   | Column 1 + Column 2                                |
|-------|--|--|--|
|       | Sand & Waste Sand Throughput This Month (tons) | Sand & Waste Sand Throughput for Previous 11 Months (tons) | 12 Month Total Sand & Waste Sand Throughput (tons) |
|       |  |  |  |
|       |  |  |  |
|       |  |  |  |

9 No deviation occurred in this quarter.

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

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

Attach a signed certification to complete this report.

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

### Part 70 Quarterly Report

**Source Name:** INTAT Precision, Inc.  
**Source Address:** 2148 State Road 3 North, Rushville, Indiana 46173  
**Mailing Address:** P.O. Box 488, Rushville, Indiana 46173  
**Part 70 Permit No.:** T139-7531-00011  
**Facility:** Grinding processes (P29 and P30)  
**Parameter:** PM and PM10 emissions  
**Limit:** The metal throughput to the grinding processes identified as P29 and P30 shall not exceed 79,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

**QUARTER:**

**YEAR:**

| Month   | Column 1                           | Column 2                                       | Column 1 + Column 2                    |
|---------|------------------------------------|--|--|
|         | Metal Throughput This Month (tons) | Metal Throughput for Previous 11 Months (tons) | 12 Month Total Metal Throughput (tons) |
| Month 1 |                                    |  |  |
| Month 2 |                                    |  |  |
| Month 3 |                                    |  |  |

No deviation occurred in this quarter.

Deviation/s occurred in this quarter.

Deviation has been reported on:

**Submitted by:** \_\_\_\_\_

**Title / Position:** \_\_\_\_\_

**Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Phone:** \_\_\_\_\_

**Attach a signed certification to complete this report.**

**Conclusion and Recommendation**

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Source Modification No. 139-22701-00011 and Significant Permit Modification No. 139-22744-00011. The staff recommends to the Commissioner that this Part 70 Significant Source Modification and Significant Permit Modification be approved.

**Appendix A: Modification Emission Summary**

**Company Name:** Intat Precision Inc.  
**Address:** 2148 State Road 3 North, Rushville, IN 46173  
**Source Modification No.:** 139-22701  
**Date:** 8/29/2007  
**Reviewer:** TE/EVP

| Uncontrolled Potential Emissions (tons/year) |                    |                            |                              |                     |                         |                |
|--|--------------------|----------------------------|------------------------------|---------------------|-------------------------|----------------|
| Emissions Generating Activity                |                    |                            |                              |                     |                         |                |
| Pollutant                                    | Inoculation (1150) | Pre-Blast Operation (3055) | Final Blast Operation (3090) | Mesh Belt Operation | Heater for scrap drying | T <sub>i</sub> |
| PM   | 175.20             | 744.60                     | 744.60                       | 819.06              | 0.01                    |                |
| PM10   | 140.16             | 74.46                      | 74.46                        | 81.91               | 0.03                    |                |
| SO <sub>2</sub>                              | 0.00               | 0.00                       | 0.00                         | 0.00                | 0.00                    |                |
| NOx  | 0.00               | 0.00                       | 0.00                         | 0.00                | 0.44                    |                |
| VOC  | 0.22               | 0.00                       | 0.00                         | 0.00                | 0.02                    |                |
| CO   | 0.00               | 0.00                       | 0.00                         | 0.00                | 0.37                    |                |
| total HAPs                                   | 0.00               | 0.10                       | 0.10                         | 0.11                | 0.01                    |                |
| worst case single HAP**                      | 0.00               | <0.10                      | <0.10                        | <0.11               | (Hexane) 0.008          | (M)            |

Total emissions based on rated capacity at 8,760 hours/year.

| Controlled/Limited Emissions (tons/year) |                     |                            |                              |                     |                         |                |
|--|---------------------|----------------------------|------------------------------|---------------------|-------------------------|----------------|
| Emissions Generating Activity            |                     |                            |                              |                     |                         |                |
| Pollutant                                | Inoculation (1150)* | Pre-Blast Operation (3055) | Final Blast Operation (3090) | Mesh Belt Operation | Heater for scrap drying | T <sub>i</sub> |
| PM                                       | 2.55                | 5.63                       | 7.88                         | 5.41                | 0.01                    |                |
| PM10                                     | 2.55                | 5.63                       | 7.88                         | 5.41                | 0.03                    |                |
| SO <sub>2</sub>                          | 0.00                | 0.00                       | 0.00                         | 0.00                | 0.00                    |                |
| NOx                                      | 0.00                | 0.00                       | 0.00                         | 0.00                | 0.44                    |                |
| VOC                                      | 0.22                | 0.00                       | 0.00                         | 0.00                | 0.02                    |                |
| CO                                       | 0.00                | 0.00                       | 0.00                         | 0.00                | 0.37                    |                |
| total HAPs                               | 0.00                | 7.5E-04                    | 1.0E-03                      | 7.1E-04             | 0.01                    |                |
| worst case single HAP**                  | 0.00                | <7.5E-04                   | <1.0E-03                     | <7.1E-04            | (Hexane) 0.008          | (Manç)         |

Total emissions based on rated capacity at 8,760 hours/year, after control and limitations.

Controlled PM and PM10 emissions are based on the design outlet grain loading and flow rates from the baghouses. PM is assumed equal to PM10.

\*Controlled PM and PM10 emissions from inoculation also include emissions from melting (1110) and pouring (2000).

Appendix A: Grey Iron Foundry Operations

**Company Name:** Intat Precision Inc.  
**Address:** 2148 State Road 3 North, Rushville, IN 46173  
**Source Modification No.:** 139-22701  
**Date:** 8/29/2007  
**Reviewer:** TE/EVP

| SCC# 3-04-003-10<br>Inoculation (1150)            |                                    |                                      |                                     |                                     |                                     |                                     |
|---|------------------------------------|--------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| TYPE OF MATERIAL                                  | Throughput<br>LBS/HR               |                                      | 1 TON/2000 lbs                      | TON/HR                              |                                     |                                     |
| Iron  | 20000                              |                                      | 2000                                | 10                                  |                                     |                                     |
|   | <b>PM</b><br>lbs/ton metal charged | <b>PM10</b><br>lbs/ton metal charged | <b>SOx</b><br>lbs/ton metal charged | <b>NOx</b><br>lbs/ton metal charged | <b>VOC</b><br>lbs/ton metal charged | <b>CO</b><br>lbs/tons metal charged |
|   | 4.00                               | 3.2                                  | --                                  | --                                  | 0.005                               | --                                  |
| Potential Uncontrolled Emissions lbs/hr           | 40.00                              | 32.00                                | 0.00                                | 0.00                                | 0.05                                | 0.00                                |
| Potential Uncontrolled Emissions lbs/day          | 960.00                             | 768.00                               | 0.00                                | 0.00                                | 1.20                                | 0.00                                |
| <b>Potential Uncontrolled Emissions tons/year</b> | <b>175.20</b>                      | <b>140.16</b>                        | <b>0.00</b>                         | <b>0.00</b>                         | <b>0.22</b>                         | <b>0.00</b>                         |

Note: Emission factors from USEPA's Factor Information Retrieval (FIRE) Data System, version 6.23.

| SCC# 3-04-003-40<br>Pre-Blast Operation (3055) |                                    |                                      |                                     |                                     |                                     |                                     |
|--|------------------------------------|--------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| TYPE OF MATERIAL                               | Throughput<br>LBS/HR               |                                      | 1 TON/2000 lbs                      | TON/HR                              |                                     |                                     |
| Iron   | 20000                              |                                      | 2000                                | 10                                  |                                     |                                     |
|  | <b>PM</b><br>lbs/ton metal charged | <b>PM10</b><br>lbs/ton metal charged | <b>SOx</b><br>lbs/ton metal charged | <b>NOx</b><br>lbs/ton metal charged | <b>VOC</b><br>lbs/ton metal charged | <b>CO</b><br>lbs/tons metal charged |
|  | 17                                 | 1.7                                  | --                                  | --                                  | --                                  | --                                  |
| Potential Emissions lbs/hr                     | 170.00                             | 17.00                                | 0.00                                | 0.00                                | 0.00                                | 0.00                                |
| Potential Emissions lbs/day                    | 4080.00                            | 408.00                               | 0.00                                | 0.00                                | 0.00                                | 0.00                                |
| <b>Potential Emissions tons/year</b>           | <b>744.60</b>                      | <b>74.46</b>                         | <b>0.00</b>                         | <b>0.00</b>                         | <b>0.00</b>                         | <b>0.00</b>                         |

Appendix A: Grey Iron Foundry Operations

Company Name: Intat Precision Inc.  
 Address: 2148 State Road 3 North, Rushville, IN 46173  
 Source Modification No.: 139-22701  
 Date: 8/29/2007  
 Reviewer: TW/EVP

| SCC# 3-04-003-40<br>Final Blast Operation (3090) |                                   |                                      |                                    |                                    |                                    |                                    |
|--|-----------------------------------|--------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| TYPE OF MATERIAL                                 | Throughput<br>LBS/HR              |                                      | 1 TON/2000 lbs                     | TON/HR                             |                                    |                                    |
| Iron   | 20000                             |                                      | 2000                               | 10                                 |                                    |                                    |
|  | PM<br>lbs/ton metal charged<br>17 | PM10<br>lbs/ton metal charged<br>1.7 | SOx<br>lbs/ton metal charged<br>-- | NOx<br>lbs/ton metal charged<br>-- | VOC<br>lbs/ton metal charged<br>-- | CO<br>lbs/tons metal charged<br>-- |
| Potential Emissions lbs/hr                       | 170.00                            | 17.00                                | 0.00                               | 0.00                               | 0.00                               | 0.00                               |
| Potential Emissions lbs/day                      | 4080.00                           | 408.00                               | 0.00                               | 0.00                               | 0.00                               | 0.00                               |
| <b>Potential Emissions tons/year</b>             | <b>744.60</b>                     | <b>74.46</b>                         | <b>0.00</b>                        | <b>0.00</b>                        | <b>0.00</b>                        | <b>0.00</b>                        |

| SCC# 3-04-003-40<br>MeshBelt Blast Operation |                                   |                                      |                                    |                                    |                                    |                                    |
|--|-----------------------------------|--------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| TYPE OF MATERIAL                             | Throughput<br>LBS/HR              |                                      | 1 TON/2000 lbs                     | TON/HR                             |                                    |                                    |
| Iron   | 22000                             |                                      | 2000                               | 11                                 |                                    |                                    |
|  | PM<br>lbs/ton metal charged<br>17 | PM10<br>lbs/ton metal charged<br>1.7 | SOx<br>lbs/ton metal charged<br>-- | NOx<br>lbs/ton metal charged<br>-- | VOC<br>lbs/ton metal charged<br>-- | CO<br>lbs/tons metal charged<br>-- |
| Potential Emissions lbs/hr                   | 187.00                            | 18.70                                | 0.00                               | 0.00                               | 0.00                               | 0.00                               |
| Potential Emissions lbs/day                  | 4488.00                           | 448.80                               | 0.00                               | 0.00                               | 0.00                               | 0.00                               |
| <b>Potential Emissions tons/year</b>         | <b>819.06</b>                     | <b>81.91</b>                         | <b>0.00</b>                        | <b>0.00</b>                        | <b>0.00</b>                        | <b>0.00</b>                        |

|   |                |               |             |             |             |             |
|---|----------------|---------------|-------------|-------------|-------------|-------------|
| <b>Total Uncontrolled PTE (tons/year)</b> | <b>2483.46</b> | <b>370.99</b> | <b>0.00</b> | <b>0.00</b> | <b>0.22</b> | <b>0.00</b> |
|---|----------------|---------------|-------------|-------------|-------------|-------------|

**Appendix A: Grey Iron Foundry Operations**

**Company Name:** Intat Precision Inc.  
**Address:** State Road 3 North, Rushville, IN 46173  
**Source Modification No.:** 139-22701  
**Date:** 8/29/2007  
**Reviewer:** TW/EVP

**Calculation of emissions after control for above operations**

| Process  | Control Device ID | Grain Loading per Dry Standard Cubic Foot of Outlet Air | Stack Gas Flow Rate (scfm) | Total Potential PM/PM10 Emissions After Control (lbs/hr) | Total Potential PM/PM10 Emissions After Control (tons/year) |
|--|-------------------|---|----------------------------|--|---|
| Melting (1110), Pouring (2000), and Inoculation (1150) | BH6010*           | 0.0009  | 58800                      | 0.58   | 2.55  |
| Pre-Blast Operation (3055)                             | BH6030            | 0.03  | 5000                       | 1.29   | 5.63  |
| Final Blast Operation (3090)                           | BH6030            | 0.03  | 7000                       | 1.80   | 7.88  |
| MeshBelt Blast Operation                               | DC-13             | 0.03  | 4800                       | 1.23   | 5.41  |

\*Controlled emission rate from BH6010 is the average emission rate measured during a stack test performed in May, 2005.

**Total (tons/yr): 21.48**

## Appendix A: Emission Calculations HAP Emissions from Foundry Operations

**Company Name:** Intat Precision Inc.  
**Address:** 2148 State Road 3 North, Rushville, IN 46173  
**Source Modification No.:** 139-22701  
**Date:** 8/29/2007  
**Reviewer:** TE/EVP

| Process  | Maximum Rate<br>(tons iron/hr) | Pollutant        | Ef<br>(lb/ton produced) | Ebc<br>(ton/yr) | Eac<br>(ton/yr) | Control Device | Control Efficiency<br>(%) |
|--|--------------------------------|------------------|-------------------------|-----------------|-----------------|----------------|---------------------------|
| Pre-Blast Operation (3055)<br>SCC# 3-04-003-40   | 10.0                           | Total Metal HAPs | 0.00224                 | 0.10            | 7.5E-04         | Baghouse       | 99.24%                    |
|  |                                | <b>TOTAL</b>     |                         | <b>0.10</b>     | <b>7.5E-04</b>  |                |                           |
| Final Blast Operation (3090)<br>SCC# 3-04-003-40 | 10.0                           | Total Metal HAPs | 0.00224                 | 0.10            | 1.0E-03         | Baghouse       | 98.94%                    |
|  |                                | <b>TOTAL</b>     |                         | <b>0.10</b>     | <b>1.0E-03</b>  |                |                           |
| MeshBelt Blast Operation<br>SCC# 3-04-003-40     | 11.0                           | Total Metal HAPs | 0.00224                 | 0.11            | 7.1E-04         | Baghouse       | 99.34%                    |
|  |                                | <b>TOTAL</b>     |                         | <b>0.11</b>     | <b>7.1E-04</b>  |                |                           |

**Total Potential Emissions Before Controls**

**Total Emissions After Control**

**Total Metal HAPs**

**0.30 tons/year**

**2.5E-03 tons/year**

**Methodology:**

Ef = Emission factor

Ebc = Potential Emissions before controls = Rate (units/hr) x Ef(lbs/unit) x 8760 hrs/yr / 2000 lbs/hr

Eac = Potential Emissions after controls = (1-efficiency/100) x Ebc

1 lb = 2000 tons

Emission factors are from the Background Information Document (BID) for the proposed NESHAP for Iron and Steel Foundries, Subpart EEEEE, Table 3-13.

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

**Company Name:** Intat Precision Inc.  
**Address:** 2148 State Road 3 North, Rushville, IN 46173  
**Source Modification No.:** 139-22701  
**Date:** 8/29/2007  
**Reviewer:** TE/EVP

Heat Input Capacity  
MMBtu/hr

Potential Throughput  
MMCF/yr

1.0

8.8

| Emission Factor in lb/MMCF    | Pollutant |       |                 |             |      |      |
|-------------------------------|-----------|-------|-----------------|-------------|------|------|
|                               | PM*       | PM10* | SO <sub>2</sub> | NOx         | VOC  | CO   |
|                               | 1.9       | 7.6   | 0.6             | 100.0       | 5.5  | 84.0 |
|                               |           |       |                 | **see below |      |      |
| Potential Emission in tons/yr | 0.01      | 0.03  | 0.003           | 0.44        | 0.02 | 0.37 |

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

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

**Methodology**

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

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

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

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

See next page for HAPs emissions calculations.

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

**Company Name:** Intat Precision Inc.  
**Address:** 2148 State Road 3 North, Rushville, IN 46173  
**Source Modification No.:** 139-22701  
**Date:** 8/29/2007  
**Reviewer:** TE/EVP

| HAPs - Organics               |                    |                            |                         |                   |                    |
|-------------------------------|--------------------|----------------------------|-------------------------|-------------------|--------------------|
| Emission Factor in lb/MMcf    | Benzene<br>2.1E-03 | Dichlorobenzene<br>1.2E-03 | Formaldehyde<br>7.5E-02 | Hexane<br>1.8E+00 | Toluene<br>3.4E-03 |
| Potential Emission in tons/yr | 9.198E-06          | 5.256E-06                  | 3.285E-04               | 7.884E-03         | 1.489E-05          |

| HAPs - Metals                 |                 |                    |                     |                      |                   |
|-------------------------------|-----------------|--------------------|---------------------|----------------------|-------------------|
| Emission Factor in lb/MMcf    | Lead<br>5.0E-04 | Cadmium<br>1.1E-03 | Chromium<br>1.4E-03 | Manganese<br>3.8E-04 | Nickel<br>2.1E-03 |
| Potential Emission in tons/yr | 2.190E-06       | 4.818E-06          | 6.132E-06           | 1.664E-06            | 9.198E-06         |

Methodology is the same as previous page.

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

## Appendix A: Grey Iron Foundry Operations

Company Name: Intat Precision Inc.  
 Address: 2148 State Road 3 North, Rushville, IN 46173  
 Source Modification No.: 139-22701  
 Date: 8/29/2007  
 Reviewer: TE/EVP

| SCC# 3-04-003-18<br>Pouring, Cooling (P13B, P14B) |                                   |                                      |                                     |                                     |  |                                     |                                     |
|---|-----------------------------------|--------------------------------------|-------------------------------------|-------------------------------------|--|-------------------------------------|-------------------------------------|
| TYPE OF MATERIAL                                  | Maximum Throughput                |                                      |                                     |                                     |  |                                     |                                     |
|   | LBS/HR                            | TON/HR                               |                                     |                                     |  |                                     |                                     |
|   | 30000                             | 15                                   |                                     |                                     |  |                                     |                                     |
|   | Limited Throughput                |                                      |                                     |                                     |  |                                     |                                     |
| Metal   | 18037                             | 9.02                                 |                                     |                                     |  |                                     |                                     |
|   | <b>PM</b><br>lbs/ton metal<br>4.2 | <b>PM10</b><br>lbs/ton metal<br>2.06 | <b>SOx</b><br>lbs/ton metal<br>0.02 | <b>NOx</b><br>lbs/ton metal<br>0.01 | <b>VOC *</b><br>lbs/ton metal<br>1.200 | <b>CO**</b><br>lbs/ton metal<br>2.5 | <b>Mn</b><br>lbs/ton metal<br>0.001 |
| Potential Uncontrolled Emissions lbs/hr           | 63.00                             | 30.90                                | 0.30                                | 0.15                                | 18.00                                  | 37.50                               | 0.02                                |
| <b>Potential Uncontrolled Emissions tons/year</b> | <b>275.94</b>                     | <b>135.34</b>                        | <b>1.31</b>                         | <b>0.66</b>                         | <b>78.84</b>                           | <b>164.25</b>                       | <b>0.07</b>                         |
| Limited Uncontrolled Emissions lbs/hr             | 37.88                             | 18.58                                | 0.18                                | 0.09                                | 10.82                                  | 22.55                               | 0.01                                |
| <b>Limited Uncontrolled Emissions tons/year</b>   | <b>165.90</b>                     | <b>81.37</b>                         | <b>0.79</b>                         | <b>0.40</b>                         | <b>47.40</b>                           | <b>98.75</b>                        | <b>0.04</b>                         |

Note: PM, PM10, SO2 and NOx emission factors from USEPA's Factor Information Retrieval (FIRE) Data System, version 6.24.

\* VOC limit represents limit of 1.3 lb/ton of metal throughput pursuant to 326 IAC 326 IAC 2-2 (PSD) and 326 IAC 8-1-6 BACT. This limit also includes the shakeout (P16B) operation.

\*\* CO emission factor of 2.5 lb/ton of iron will limit CO emissions from the pouring, cooling and shakeout operations (P13B, P14B and P16B) to 98.75 tons per year so that CO emissions from the modification in 2004 are limited to less than 100 tons per year to render the requirements of 326 IAC 2-2 (PSD) not applicable. This includes emissions from shakeout (P16B).

| SCC# 3-04-003-31<br>Shakeout (P16B)               |                                   |                                      |                                    |                                    |  |   |                                       |
|---|-----------------------------------|--------------------------------------|------------------------------------|------------------------------------|--|---|---------------------------------------|
| TYPE OF MATERIAL                                  | Maximum Throughput                |                                      |                                    |                                    |  |   |                                       |
|   | LBS/HR                            | TON/HR                               |                                    |                                    |  |   |                                       |
|   | 30000                             | 15                                   |                                    |                                    |  |   |                                       |
|   | Limited Throughput                |                                      |                                    |                                    |  |   |                                       |
| Metal   | 18037                             | 9.02                                 |                                    |                                    |  |   |                                       |
|   | <b>PM</b><br>lbs/ton metal<br>3.2 | <b>PM10</b><br>lbs/ton metal<br>2.24 | <b>SOx</b><br>lbs/ton metal<br>0.0 | <b>NOx</b><br>lbs/ton metal<br>0.0 | <b>VOC</b><br>lbs/ton metal<br>see above | <b>CO</b><br>lbs/ton metal<br>see above | <b>Mn</b><br>lbs/ton metal<br>4.2E-03 |
| Potential Uncontrolled Emissions lbs/hr           | 48.00                             | 33.60                                | 0.00                               | 0.00                               | 0.00                                     | 0.00                                    | 0.06                                  |
| <b>Potential Uncontrolled Emissions tons/year</b> | <b>210.24</b>                     | <b>147.17</b>                        | <b>0.00</b>                        | <b>0.00</b>                        | <b>0.00</b>                              | <b>0.00</b>                             | <b>0.28</b>                           |
| Limited Uncontrolled Emissions lbs/hr             | 28.86                             | 20.20                                | 0.00                               | 0.00                               | 0.00                                     | 0.00                                    | 0.04                                  |
| <b>Limited Uncontrolled Emissions tons/year</b>   | <b>126.40</b>                     | <b>88.48</b>                         | <b>0.00</b>                        | <b>0.00</b>                        | <b>0.00</b>                              | <b>0.00</b>                             | <b>0.17</b>                           |

Note: PM and PM10 emission factors from USEPA's Factor Information Retrieval (FIRE) Data System, version 6.24.

## Appendix A: Grey Iron Foundry Operations

Company Name: Intat Precision Inc.  
Address: 2148 State Road 3 North, Rushville, IN 46173  
Source Modification No.: 139-22701  
Date: 8/29/2007  
Reviewer: TE/EVP

| SCC# 3-04-003-18<br>Pouring (2000), Casting cooling/conveyor system (2015 and 2020) |                            |                               |                              |                              |                                 |                              |                              |
|---|----------------------------|-------------------------------|------------------------------|------------------------------|---------------------------------|------------------------------|------------------------------|
| TYPE OF MATERIAL  | Maximum Throughput         |                               |                              |                              |                                 |                              |                              |
|   | LBS/HR                     | TON/HR                        |                              |                              |                                 |                              |                              |
|   | 20000                      | 10                            |                              |                              |                                 |                              |                              |
|   | Limited Throughput         |                               |                              |                              |                                 |                              |                              |
| Metal   | 14041                      | 7.02                          |                              |                              |                                 |                              |                              |
|   | PM<br>lbs/ton metal<br>4.2 | PM10<br>lbs/ton metal<br>2.06 | SOx<br>lbs/ton metal<br>0.02 | NOx<br>lbs/ton metal<br>0.01 | VOC *<br>lbs/ton metal<br>0.800 | CO**<br>lbs/ton metal<br>3.2 | Mn<br>lbs/ton metal<br>0.001 |
| Potential Uncontrolled Emissions lbs/hr   | 42.00                      | 20.60                         | 0.20                         | 0.10                         | 8.00                            | 32.00                        | 0.01                         |
| <b>Potential Uncontrolled Emissions tons/year</b>                                   | <b>183.96</b>              | <b>90.23</b>                  | <b>0.88</b>                  | <b>0.44</b>                  | <b>35.04</b>                    | <b>140.16</b>                | <b>0.04</b>                  |
| Limited Uncontrolled Emissions lbs/hr   | 29.49                      | 14.46                         | 0.14                         | 0.07                         | 5.62                            | 22.47                        | 0.01                         |
| <b>Limited Uncontrolled Emissions tons/year</b>                                     | <b>129.15</b>              | <b>63.35</b>                  | <b>0.62</b>                  | <b>0.31</b>                  | <b>24.60</b>                    | <b>98.40</b>                 | <b>0.03</b>                  |

Note: PM, PM10, SO2 and NOx emission factors from USEPA's Factor Information Retrieval (FIRE) Data System, version 6.24.

\* VOC limit represents limit of 0.8 lb/ton of metal throughput based on VOC limit to render the requirements of 326 IAC 8-1-6 not applicable. This limit also includes the shakeout (3010) operation.

\*\* CO emission factor of 3.2 lb/ton of iron will limit CO emissions from the pouring, cooling and shakeout operations (2000, 2015, 2020, and 3010) to 98.4 tons per year so that CO emissions from the modification in 1997 are limited to less than 100 tons per year to render the requirements of 326 IAC 2-2 (PSD) not applicable. This includes emissions from shakeout (3010).

| SCC# 3-04-003-31<br>Shakeout (3010)               |                            |                               |                             |                             |                                   |                                  |                                |
|---|----------------------------|-------------------------------|-----------------------------|-----------------------------|-----------------------------------|----------------------------------|--------------------------------|
| TYPE OF MATERIAL                                  | Maximum Throughput         |                               |                             |                             |                                   |                                  |                                |
|   | LBS/HR                     | TON/HR                        |                             |                             |                                   |                                  |                                |
|   | 20000                      | 10                            |                             |                             |                                   |                                  |                                |
|   | Limited Throughput         |                               |                             |                             |                                   |                                  |                                |
| Metal   | 14041                      | 7.02                          |                             |                             |                                   |                                  |                                |
|   | PM<br>lbs/ton metal<br>3.2 | PM10<br>lbs/ton metal<br>2.24 | SOx<br>lbs/ton metal<br>0.0 | NOx<br>lbs/ton metal<br>0.0 | VOC<br>lbs/ton metal<br>see above | CO<br>lbs/ton metal<br>see above | Mn<br>lbs/ton metal<br>4.2E-03 |
| Potential Uncontrolled Emissions lbs/hr           | 32.00                      | 22.40                         | 0.00                        | 0.00                        | 0.00                              | 0.00                             | 0.04                           |
| <b>Potential Uncontrolled Emissions tons/year</b> | <b>140.16</b>              | <b>98.11</b>                  | <b>0.00</b>                 | <b>0.00</b>                 | <b>0.00</b>                       | <b>0.00</b>                      | <b>0.18</b>                    |
| Limited Uncontrolled Emissions lbs/hr             | 22.47                      | 15.73                         | 0.00                        | 0.00                        | 0.00                              | 0.00                             | 0.03                           |
| <b>Limited Uncontrolled Emissions tons/year</b>   | <b>98.40</b>               | <b>68.88</b>                  | <b>0.00</b>                 | <b>0.00</b>                 | <b>0.00</b>                       | <b>0.00</b>                      | <b>0.13</b>                    |

Note: PM and PM10 emission factors from USEPA's Factor Information Retrieval (FIRE) Data System, version 6.24.

**Appendix A: Grey Iron Foundry Operations**

**Company Name:** Intat Precision Inc.  
**Address:** State Road 3 North, Rushville, IN 46173  
**Source Modification No.:** 139-22701  
**Date:** 8/29/2007  
**Reviewer:** TE/EVP

**Calculation of emissions after control for above operations**

| Process   | Control Device ID | Grain Loading per Dry Standard Cubic Foot of Outlet Air | Stack Gas Flow Rate (scfm) | Total Potential PM/PM10 Emissions After Control (lbs/hr) | Total Potential PM/PM10 Emissions After Control (tons/year) |
|---|-------------------|---|----------------------------|--|---|
| Pouring (P13B)  | DC3B              | 0.003   | 66225                      | 1.70   | 7.46  |
| Cooling and Shakeout (P14B, P16B)                                   | BH6200            | 0.003   | 111000                     | 2.85   | 12.50   |
| Pouring (2000)  | BH6010            | 0.01  | 58000                      | 4.97   | 21.77   |
| Casting cooling/conveyor system (2015 and 2020) and Shakeout (3010) | BH6020 and BH6030 | 0.01  | 59250                      | 5.08   | 22.24   |

**Total (tons/yr): 63.98**

**Appendix A: Emissions Calculations  
VOC and Particulate  
From Surface Coating Operations (Insignificant Activity)**

**Company Name: Intat Precision Inc.  
Address: 2148 State Road 3 North, Rushville, IN 46173  
Source Modification No.: 139-22701  
Date: 8/29/2007  
Reviewer: TE/EVP**

| Material            | Density (Lb/Gal) | Weight % Volatile (H2O & Organics) | Weight % Water | Weight % Organics | Volume % Water | Volume % Non-Volatiles (solids) | Gal of Mat. (gal/hour) | Pounds VOC per gallon of coating less water | Pounds VOC per gallon of coating | Potential VOC pounds per hour | Potential VOC pounds per day | Potential VOC tons per year | Particulate Potential (ton/yr) | lb VOC/gal solids | Transfer Efficiency |
|---------------------|------------------|------------------------------------|----------------|-------------------|----------------|---------------------------------|------------------------|---|----------------------------------|-------------------------------|------------------------------|-----------------------------|--------------------------------|-------------------|---------------------|
| W/B Low Gloss Black | 11.3             | 45.82%                             | 0.0%           | 45.8%             | 0.0%           | 37.49%                          | 0.20548                | 5.20  | 5.20                             | 1.07                          | 25.62                        | 4.68                        | 2.21                           | 13.86             | 60%                 |

**State Potential Emissions**

**Add worst case coating to all solvents**

|             |              |             |             |
|-------------|--------------|-------------|-------------|
| <b>1.07</b> | <b>25.62</b> | <b>4.68</b> | <b>2.21</b> |
|-------------|--------------|-------------|-------------|

| PM control eff. of dry filters | Controlled VOC pounds per hour | Potential VOC pounds per day | Potential VOC tons per year | Particulate Potential (ton/yr) |
|--------------------------------|--------------------------------|------------------------------|-----------------------------|--------------------------------|
| 98.50%                         | 1.07                           | 25.62                        | 4.68                        | 0.03                           |

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) \* Weight % Organics) / (1-Volume % water)  
 Pounds of VOC per Gallon Coating = (Density (lb/gal) \* Weight % Organics)  
 Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr)  
 Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (24 hr/day)  
 Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (8760 hr/yr) \* (1 ton/2000 lbs)  
 Particulate Potential Tons per Year = (units/hour) \* (gal/unit) \* (lbs/gal) \* (1- Weight % Volatiles) \* (1-Transfer efficiency) \*(8760 hrs/yr) \*(1 ton/2000 lbs)  
 Pounds VOC per Gallon of Solids = (Density (lbs/gal) \* Weight % organics) / (Volume % solids)  
 Total = Worst Coating + Sum of all solvents used

**HAP Emission Calculations**

| Material            | Density (Lb/Gal) | Weight % Glycol Ether | Gal of Mat. (gal/hour) | Potential Glycol Ether tons per year |
|---------------------|------------------|-----------------------|------------------------|--------------------------------------|
| W/B Low Gloss Black | 11.3             | 5.00%                 | 0.20548                | 0.51                                 |

**METHODOLOGY**

HAPS emission rate (tons/yr) = Density (lb/gal) \* Gal of Material (gal/unit) \* Maximum (unit/hr) \* Weight % HAP \* 8760 hrs/yr \* 1 ton/2000 lbs

**Appendix A: Grey Iron Foundry Operations**

**Company Name:** Intat Precision Inc.  
**Address:** 2148 State Road 3 North, Rushville, IN 46173  
**Source Modification No.:** 139-22701  
**Date:** 8/29/2007  
**Reviewer:** TE/EVP

Isocure Core Making Process

| Machine | Date of Construction | Capacity (tons cores/hr) | Maximum Resin Content (%) | VOC Emission Factor from Resin Evaporation (lb/ton cores) | Max DMIPA Usage (lb DMIPA/ton cores) | Potential VOC Emissions from resin evap (tons/yr) | Potential VOC Emissions from Catalyst usage (tons/yr) | Total Potential VOC Emissions (tons/yr) |
|---------|----------------------|--------------------------|---------------------------|---|--------------------------------------|---|---|---|
| P4      | 1988                 | 0.5                      | 1.60%                     | 1.6   | 1.12                                 | 3.50  | 2.45  | 5.96                                    |
| P5      | 1988                 | 0.5                      | 1.60%                     | 1.6   | 1.12                                 | 3.50  | 2.45  | 5.96                                    |
| P6      | 1988                 | 0.5                      | 1.60%                     | 1.6   | 1.12                                 | 3.50  | 2.45  | 5.96                                    |
| P7      | 1994                 | 0.5                      | 1.60%                     | 1.6   | 1.12                                 | 3.50  | 2.45  | 5.96                                    |
| Total   |                      |                          |                           |   |                                      | <b>14.02</b>                                      | <b>9.81</b>   | <b>23.83</b>                            |

**Appendix A: Emissions Calculations  
 Natural Gas Combustion Only  
 MM BTU/HR <100  
 Ladle Heaters**

**Company Name:** Intat Precision Inc.  
**Address:** 2148 State Road 3 North, Rushville, IN 46173  
**Source Modification No.:** 139-22701  
**Date:** 8/29/2007  
**Reviewer:** TE/EVP

Heat Input Capacity  
MMBtu/hr

Potential Throughput  
MMCF/yr

2.800

24.528

| Emission Factor in lb/MMCF    | Pollutant |       |      |                      |      |      |          |
|-------------------------------|-----------|-------|------|----------------------|------|------|----------|
|                               | PM*       | PM10* | SO2  | NOx                  | VOC  | CO   | HAPs     |
|                               | 1.9       | 7.6   | 0.6  | 100.0<br>**see below | 5.5  | 84.0 | 1.89     |
| Potential Emission in tons/yr | 0.02      | 0.09  | 0.01 | 1.23                 | 0.07 | 1.03 | 2.31E-02 |

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

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

HAPs emission factor is the sum of both organic and metal HAPs

**Methodology**

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

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

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

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

**Appendix A: Grey Iron Foundry Operations  
Plant 1, Casting Line 2 Permit Limit Summary**

**Company Name:** Intat Precision Inc.  
**Address:** 2148 State Road 3 North, Rushville, IN 46173  
**Source Modification No.:** 139-22701  
**Date:** 8/29/2007  
**Reviewer:** TE/EVP

**Production Limit**                      **79,000**    tons per year metal  
**368,667**    tons per year sand

| Unit   | Control Equipment | Air Flow, dscfm | Grain Loading Limit, gr/dscf | PM Emissions (Synthetic Minor) |           |       | PM10 Limits (Synthetic Minor & PSD) |         |       | CO Limits (Synthetic Minor) |        | VOC Limits (State BACT & PSD) |       |
|--|-------------------|-----------------|------------------------------|--------------------------------|-----------|-------|-------------------------------------|---------|-------|-----------------------------|--------|-------------------------------|-------|
|  |                   |                 |                              | lb/hr                          | (lb/ton)* | tpy   | lbs/hr                              | lb/ton* | tpy   | lbs/ton                     | tpy    | lbs/ton                       | tpy   |
| Charge Handling (P1, P2, P3) (1988)  | None              |                 |                              | 0.24                           |           | 1.05  | 0.24                                |         | 1.05  |                             |        |                               |       |
| Holding Furnaces (P9) (1988)   | None              |                 |                              |                                | 0.10      | 3.95  |                                     | 0.10    | 3.95  |                             |        |                               |       |
| Plant 1 Grinding (P29, P30) (1988)   | DC-8A             |                 |                              |                                | 0.20      | 7.90  |                                     | 0.20    | 7.90  |                             |        |                               |       |
| 4 Core Machines (1988, 1994)   | DC-9              |                 |                              | 0.82                           |           | 3.59  | 0.82                                |         | 3.59  |                             |        |                               | 23.83 |
| Ladle heaters (P10) (2004)   | None              |                 |                              |                                |           | 0.02  |                                     |         | 0.09  |                             | 1.030  |                               | 0.07  |
| Melt/ Metal Treatment (P8, P11) (1988, 2004)   | DC 3A             | 66,225          | 0.003                        | 1.70                           | 0.085     | 3.36  |                                     |         |       |                             |        |                               |       |
| Melt/Metal Treatment/ Pouring (P8, P11, P13B) (1988, 2004)   | DC 3B             | 66,225          | 0.003                        | 1.70                           | 0.085     | 3.36  |                                     | 0.633   | 25.00 |                             |        |                               |       |
| Mold Cooling/ Shakeout/ Casting Conveyor/ Desprue (P14B, P16B, P17B, P18B, P19B, P20B, P21B, and P22B) (2004)        | BH1-6200          | 111,000         | 0.003                        | 2.85                           | 0.19      | 7.52  |                                     | 1.045   | 41.28 | 2.5                         | 98.750 | 1.20                          | 47.4  |
| Sand System (P32B, P33B, P34B, P35B, P36B, P37B and P39B) (2004)   | BH1-6400          | 44,000          | 0.003                        | 1.13                           | 0.016     | 2.98  |                                     | 0.020   | 3.69  |                             |        |                               |       |
| Shotblast (P40, P41 and P42), Casting Conveyor, Desprue (P17B, P18B, P19B, P20B, P21B, and P22B) (2004)              | DC 8B             | 40,000          | 0.003                        | 1.03                           | 0.11      | 4.51  |                                     | 0.085   | 3.36  |                             |        |                               |       |
| Desprue and casting Conveyors (P17B, P18B, P19B, P20B, P21B, and P22B) (2004)  | DC7               | 21,300          | 0.003                        | 0.55                           | 0.037     | 1.44  | 1.03                                | 0.085   | 3.36  |                             |        |                               |       |
| Bad Heat Shakeout (2004)   | DC5               | 17,400          | 0.003                        | 0.45                           | 0.030     | 1.18  |                                     | 0.03    | 1.19  |                             |        |                               |       |
| Wheelerator MeshBelt Shot Blast (2001)   | DC-13             | 4,800           |                              | 5.70                           |           | 24.97 | 3.40                                |         | 14.89 |                             |        |                               |       |
| Total of Original Plant 1 Processes Constructed Prior to 1997 (includes Melting (P8) originally constructed in 1988) |                   |                 |                              | 23.22                          |           |       | 41.50                               |         |       | 0.00                        |        | 23.83                         |       |
| Total Line 2 Modifications w/o Bad Heat Shakeout (2004)**  |                   |                 |                              | 23.20                          |           |       | 76.77                               |         |       | 99.78                       |        | 47.47                         |       |
| Total for all Processes w/o Bad Heat shakeout  |                   |                 |                              | 46.42                          |           |       | 118.27                              |         |       | 99.78                       |        | 71.30                         |       |
| Total for all Processes  |                   |                 |                              | 69.62                          |           |       | 124.77                              |         |       | 99.78                       |        | 118.70                        |       |

\* values are pounds per ton of metal, except for the sand system which is lbs per ton sand.

\*\* Since the throughput of metal poured will pass through either the normal shakeout or the bad heat shakeout, but not both, emissions from the modification do not include emissions from both.

## APPENDIX B: BACT ANALYSIS

### Source Background and Description

|                                      |  |
|--------------------------------------|--|
| Source Name:                         | INTAT Precision, Inc.                        |
| Source Location:                     | 2148 State Road 3 North, Rushville, IN 46713 |
| County:                              | Rush   |
| SIC Code:                            | 3321   |
| Operation Permit No.:                | T139-7531-00011                              |
| Operation Permit Issuance Date:      | September 2, 2003                            |
| Significant Source Modification No.: | 139-22701-00011                              |
| Significant Permit Modification No.: | 139-22744-00011                              |
| Permit Reviewer:                     | Trish Earls/EVP                              |

On April 26, 2004, INTAT Precision, Inc. (INTAT) was issued Significant Permit Modification 139-18320-00011 to modify Plant 1, Casting Line 2. INTAT accepted a Volatile Organic Compound (VOC) limit of 0.8 pounds of VOC per ton of metal and 61,500 tons per year of metal, which equates to less than 25 tons per year of VOC emissions, on the Pouring, Cooling and Shakeout (PCS) processes and the bad heat shakeout, combined, in order to render the requirements of 326 IAC 8-1-6 (BACT) not applicable. Testing was conducted on the processes in September 2005 and the results show that the facility cannot meet the VOC limit. Since the 0.8 pound per ton limit has been exceeded and the stack test results indicate that at a metal throughput of 61,500 tons per year the VOC emissions would also be greater than the PSD significant threshold of 40 tons per year, the Pouring (P13B), Cooling (P14B), Shakeout (P16B) and bad heat shakeout processes cannot meet a 25 ton per year VOC limit and the process is subject to the Best Available Control Technology (BACT) requirements pursuant to 326 IAC 8-1-6 and 326 IAC 2-2 (PSD).

The current production limit of 61,500 tons per year was established in Significant Permit Modification No. 139-18320-00011, issued April 6, 2004 to authorize construction of Casting Line 2 to render the requirements of 326 IAC 2-2 (PSD) not applicable for PM emissions and to render the requirements of 326 IAC 2-2 (PSD) and 326 IAC 8-1-6 (BACT) not applicable for VOC emissions. The modification was subject to 326 IAC 2-2 (PSD) for PM10 and the SPM included a PSD review pursuant to 326 IAC 2-2 for PM10 including a PSD BACT assessment and an air quality assessment.

In the PSD BACT analysis that was performed for PM10 in the SPM referenced above, neither the BACT determination nor the PSD modeling were based on the metal throughput limit in the permit. BACT was determined to be the use of dust collectors on all of the production processes with a filterable PM10 emission limit of 0.003 gr/dscf, and hourly limits for each process. There were also filterable plus condensable PM10 emission limits in pounds per ton for each process. The stringency of these limits will not be affected by the proposed increase in production. The modeling assessment for PM10 performed in support of the original permit for Casting Line 2 was based on the pound per hour emission limits and as such did not rely on the annual production limit. As such the modeling analysis is still valid even with the proposed increase in annual production.

### BACT Analysis

IDEM conducts BACT analyses in accordance with the "Top-Down" Best Available Control Technology Guidance Document outlined in the 1990 draft USEPA New Source Review Workshop Manual, which outlines the steps for conducting a top-down BACT analysis. Those steps are listed below.

- (1) Identify alternative emission control techniques;
- (2) Technical Feasibility Analysis of BACT Options;
- (3) Rank remaining control technologies by control effectiveness;
- (4) The BACT Selection Process; and
- (5) Selecting BACT.

Also in accordance with the “*Top-Down*” *Best Available Control Technology Guidance Document* outlined in the 1990 draft USEPA *New Source Review Workshop Manual*, BACT analyses take into account the energy, environmental, and economic impacts on the source. Emission reductions may be determined through the application of available control techniques, process design, and/or operational limitations. Such reductions are necessary to demonstrate that the emissions remaining after application of BACT will not cause or contribute to air pollution thereby protecting public health and the environment.

**Step 1 – Identify Alternative Emission Control Techniques**

The first step in evaluating BACT is identifying all applicable control technology options for the Pouring (P13B), Cooling (P14B), Shakeout (P16B) and bad heat shakeout operations. The RACT, BACT, LAER Clearinghouse (RBLC) was reviewed to obtain recent determinations for VOCs from similar processes. The search criteria used was “iron and steel foundries (SIC 3321)” with VOC as the pollutant. This search was limited to a review of all facilities listed since 1996 and included both gray and ductile iron foundries. Other state permit files were also reviewed by INTAT where they were reasonably available to identify emission limitations for recently permitted similar foundry sources where they were not already included in the RBLC information.

The following tables summarize the results from the RACT/BACT/LAER Clearinghouse. Table 1 shows the results of the BACT determinations for VOCs from pouring and cooling lines. Table 2 shows the results of the BACT determinations for VOC from shakeout systems. Sources are arranged in descending order in terms of the pounds per ton VOC limit.

**Table 1: Recent BACT Determinations for VOC from Pouring and Cooling Lines**

| Company                                      | Date Issued | Description  | Limit****                  | Controls |
|--|-------------|--|----------------------------|----------|
| Waupaca Foundry, Inc. – Plant 5, Perry, IN   | 1/19/1996   | Pouring/mold cooling 4 lines, 73 tons/hour         | (0.02 lb/T)*<br>1.46 lb/hr | None     |
| Ardmore Foundry, Carter, OK                  | 9/14/2001   | Pouring & cooling, 28.1 tons/hour                  | (0.19 lb/T)*<br>5.25 lb/hr | None     |
| Waupaca Foundry, Inc. – Plant 1, Waupaca, WI | 6/11/2002   | Pour/mold cooling, 14 tons/hour                    | 0.5 lb/T<br>3.5 lb/hr      | None     |
| Waupaca Foundry, Inc. – Plant 1, Waupaca, WI | 7/1/1998    | Pouring/mold cooling, 16 tons/hour                 | 0.5 lb/T<br>4.0 lb/hr      | None     |
| Waupaca Foundry, Inc. – Plant 3, Waupaca, WI | 12/22/1999  | Pouring/mold cooling, 16 tons/hour                 | 0.5 lb/T<br>8.0 lb/hr      | None     |
| Waupaca Foundry, Inc. – Plant 3, Waupaca, WI | 12/23/1998  | Pouring/mold cooling, 16 tons/hour                 | 0.5 lb/T<br>8.0 lb/hr      | None     |
| Waupaca Foundry, Inc. – Plant 5, Perry, IN   | 2/4/1998    | Pouring/cooling lines 6 & 8 phase II, 18 tons/hour | 0.5 lb/T<br>(9.0 lb/hr)*   | None     |
| Waupaca Foundry, Inc. – Plant 5, Perry, IN   | 2/4/1998    | Pour/ cooling, 25 tons/hour                        | 0.5 lb/T<br>12.5 lb/hr     | None     |
| Waupaca Foundry, Inc. – Plant 5, Perry, IN   | 2/4/1998    | Pouring/cooling line 5 phase 2, 25 tons/hour       | 0.5 lb/T<br>12.5 lb/hr     | None     |
| Waupaca Foundry, Inc. – Plant 5, Perry, IN   | 2/4/1998    | Pouring/cooling line 7 phase II, 30 tons/hour      | 0.5 lb/T<br>(15.0 lb/hr)*  | None     |

| Company   | Date Issued       | Description   | Limit****  | Controls   |
|---|-------------------|---|--|--|
| Dalton Corporation,<br>Warsaw Manufacturing<br>Facility, Warsaw, IN | 5/09/2007         | Herman Pouring<br>Station and Castings<br>Cooling Process, 28<br>tons/hour        | 0.163 lb/T<br>(pouring) +<br>0.36 lb/T<br>(cooling) =<br>0.523 lb/T<br>5.41 lb/hr  | Sonoperoxone®<br>system or an<br>equivalent system,<br>sand<br>system<br>optimization, low<br>VOC core resin<br>binder materials,<br>and automatic mold<br>vent-off gas<br>ignition. |
| <b>INTAT Precision, Inc.,<br/>Rushville, IN</b>                     | <b>(Proposed)</b> | <b>Pouring, cooling,<br/>shakeout and bad<br/>heat shakeout, 15<br/>tons/hour</b> | <b>1.2 lb/T<br/>(18 lb/hr)*</b>  | <b>AO system**</b>   |
| Aarrow Cast, Shawano,<br>WI   | 10/1/1998         | Pouring, cooling &<br>shakeout, 15<br>tons/hour                                   | 0.35 lb/T<br>P25<br>(pouring)<br>2.2 lb/T P26<br>(cooling)<br>(5.25 lb/hr<br>for pouring,<br>33.0 lb/hr for<br>cooling)* | None   |
| Waupaca Foundry, Inc. –<br>Plant 6, McMinn, TN                      | 8/24/2001         | Mold cooling &<br>shakeout lines 1 & 2,<br>16 tons/hour per line                  | (6.0 lb/T per<br>line)*<br>96 lb/hr per<br>line  | None   |
| Waupaca Foundry, Inc. –<br>Plant 6, McMinn, TN                      | 8/24/2001         | Mold cooling &<br>shakeout lines 3 & 4,<br>30 tons/hour per line                  | (6.0 lb/T per<br>line)*<br>180 lb/hr per<br>line   | None   |
| Brillion Iron Works,<br>Calumet, WI                                 | 8/6/1997          | Casting, pouring, 4<br>tons/hour  | 8.0 lb/T<br>(32.0 lb/hr)*  | None   |

**Table 2: Recent BACT Determinations for VOC from Shakeout Systems**

| Company   | Date Issued | Description                                | Limit****                | Controls |
|---|-------------|--|--------------------------|----------|
| Waupaca Foundry, Inc. –<br>Plant 1, Waupaca, WI | 5/27/1999   | Shakeout DISA line 3,<br>10 tons/hour      | 0.1 lb/T<br>1.0 lb/hr    | None     |
| Waupaca Foundry, Inc. –<br>Plant 1, Waupaca, WI | 6/11/2002   | Shakeout DISA line 4,<br>14 tons/hour      | 0.1 lb/T<br>1.4 lb/hr    | None     |
| Waupaca Foundry, Inc. –<br>Plant 3, Waupaca, WI | 12/22/1999  | Shakeout line 1, 16<br>tons/hour           | 0.1 lb/T<br>(1.6 lb/hr)* | None     |
| Waupaca Foundry, Inc. –<br>Plant 3, Waupaca, WI | 12/22/1999  | Shakeout line 2, 16<br>tons/hour           | 0.1 lb/T (1.6<br>lb/hr)* | None     |
| Waupaca Foundry, Inc. –<br>Plant 5, Perry, IN   | 2/4/1998    | Shakeout line 8, phase<br>II, 18 tons/hour | 0.1 lb/T<br>(1.8 lb/hr)* | None     |
| Waupaca Foundry, Inc. –<br>Plant 5, Perry, IN   | 2/4/1998    | Shakeout line 1, 25<br>tons/hour           | 0.1 lb/T (2.5<br>lb/hr)* | None     |
| Waupaca Foundry, Inc. –<br>Plant 5, Perry, IN   | 2/4/1998    | Shakeout line 5 phase<br>II, 25 tons/hour  | 0.1 lb/T<br>(2.5 lb/hr)* | None     |
| Waupaca Foundry, Inc. –<br>Plant 5, Perry, IN   | 2/4/1998    | Shakeout line 7, phase<br>II, 30 tons/hour | 0.1 lb/T (3.0<br>lb/hr)* | None     |
| Waupaca Foundry, Inc. –<br>Plant 5, Perry, IN   | 1/19/1996   | Shakeout 4 lines, 73<br>tons/hour          | 0.1 lb/T<br>7.3 lb/hr    | None     |

| Company   | Date Issued       | Description   | Limit****   | Controls   |
|---|-------------------|---|---|--|
| Dalton Corporation, Warsaw Manufacturing Facility, Warsaw, IN | 5/09/2007         | Herman 3 Shakeout and Herman 3 Sand Handling operations, 28 tons/hour of iron and 165 tons/hour of sand | 0.115 lb/T of metal and sand combined<br>8.32 lb/hr | Sonoperoxone® system or an equivalent system, sand system optimization, low VOC core resin binder materials, and automatic mold vent-off gas ignition. |
| Waupaca Foundry, Inc. – Plant 6, McMinn, TN                   | 8/24/2001         | Mold cooling/shakeout lines 1 & 2, 16 tons/hour per line  | (0.6 lb/T)*<br>9.6 lb/hr per line                   | None   |
| Waupaca Foundry, Inc. – Plant 6, McMinn, TN                   | 8/24/2001         | Mold cooling/shakeout lines 3 & 4, 30 tons/hour per line  | (0.6 lb/T)*<br>18 lb/hr per line                    | None   |
| <b>INTAT Precision, Inc., Rushville, IN</b>                   | <b>(Proposed)</b> | <b>Pouring, cooling, shakeout and bad heat shakeout, 15 tons/hour</b>                                   | <b>1.2 lb/T (18 lb/hr)*</b>                         | <b>AO system</b>   |
| Ardmore Foundry, Oklahoma City, OK                            | 9/4/2001          | Shakeout, 28.1 tons/hour  | (1.2 lb/T)*<br>33.38 lb/hr                          | None   |
| Aarrow Cast, Shawano, WI                                      | 11/1/1998         | Existing sand handling & shakeout, 15 tons/hour   | 2.2 lb/T<br>(33 lb/hr)*                             | None   |

\* These emission rates were not limits specified in the permit issued to the source. They are based on calculations performed using the emission limit and maximum metal throughput capacity specified in the permit.

\*\* The AO system proposed by INTAT, Precision, Inc. is the same type of control device as the Sonoperoxone® system required pursuant to 326 IAC 2-2-3 and 326 IAC 8-1-6 for Dalton Corporation, Warsaw Manufacturing Facility.

\*\*\*Based on the information available in the RBLC database, compliance with the BACT limits listed above has only been indicated to be verified for the following sources:

- (a) Waupaca Foundry Plant 1, RBLC ID WI-0190, pouring/cooling
- (b) Waupaca Foundry Plant 1, RBLC ID WI-0190, Shakeout DISA Line 4
- (c) Waupaca Foundry Plant 1, RBLC ID WI-0184, Shakeout DISA Line 3

\*\*\*\*The most stringent limit found for pouring and cooling combined was an emission limitation of 0.2 pounds of VOC per ton of metal. The most stringent limit for shakeout was 0.1 pounds of VOC per ton of metal. These limits were for Waupaca Foundry's pouring, cooling and shakeout lines at Plants 1 and 3 in Waupaca County, Wisconsin and Plant 5 in Perry County, Indiana.

**Table 3: Comparison of VOC limits for Pouring, Cooling and Shakeout Combined**

| Company                                      | Pouring and Cooling                         | Shakeout                         | Total     |
|--|---|----------------------------------|-----------|
| Waupaca Foundry, Inc. – Plant 5, Perry, IN   | 0.02 lb/T<br>Pouring/mold cooling 4 lines   | 0.1 lb/T<br>Shakeout 4 lines     | 0.12 lb/T |
| Ardmore Foundry, Carter, OK                  | 0.19 lb/T                                   | 1.2 lb/T                         | 1.39 lb/T |
| Waupaca Foundry, Inc. – Plant 1, Waupaca, WI | 0.5 lb/T<br>Pour/mold cooling, 14 tons/hour | 0.1 lb/T<br>Shakeout DISA line 4 | 0.60 lb/T |

| <b>Company</b>  | <b>Pouring and Cooling</b>                                    | <b>Shakeout</b>  | <b>Total</b>    |
|---|---|--|-----------------|
| Waupaca Foundry, Inc. – Plant 1, Waupaca, WI*                 | 0.5 lb/T<br>Pouring/mold cooling, 16 tons/hour                | 0.1 lb/T<br>Shakeout DISA line 3, 10 tons/hour   | 0.60 lb/T       |
| Waupaca Foundry, Inc. – Plant 3, Waupaca, WI                  | 0.5 lb/T  | 0.1 lb/T<br>Shakeout line 1  | 0.60 lb/T       |
| Waupaca Foundry, Inc. – Plant 3, Waupaca, WI*                 | 0.5 lb/T  | 0.1 lb/T<br>Shakeout line 2  | 0.60 lb/T       |
| Waupaca Foundry, Inc. – Plant 5, Perry, IN                    | 0.5 lb/T<br>Pouring/cooling lines 6 & 8 phase II              | 0.1 lb/T<br>Shakeout line 8, phase II  | 0.60 lb/T       |
| Waupaca Foundry, Inc. – Plant 5, Perry, IN                    | 0.5 lb/T<br>Pour/ cooling                                     | 0.1 lb/T<br>Shakeout line 1  | 0.60 lb/T       |
| Waupaca Foundry, Inc. – Plant 5, Perry, IN                    | 0.5 lb/T<br>Pouring/cooling line 5 phase II                   | 0.1 lb/T<br>Shakeout line 5 phase II   | 0.60 lb/T       |
| Waupaca Foundry, Inc. – Plant 5, Perry, IN                    | 0.5 lb/T<br>Pouring/cooling line 7 phase II                   | 0.1 lb/T<br>Shakeout line 7, phase II  | 0.60 lb/T       |
| Dalton Corporation, Warsaw Manufacturing Facility, Warsaw, IN | 0.163 lb/T (pouring) + 0.36 lb/T (cooling) = 0.523 lb/T       | 0.115 lb/T of metal and sand combined<br>Herman 3 Shakeout and Herman 3 Sand Handling operations | 0.638 lb/T      |
| <b>INTAT Precision, Inc.,<br/>Rushville, IN (Proposed)</b>    | <b>1.2 lb/T</b>   |  | <b>1.2 lb/T</b> |
| Aarrow Cast, Shawano, WI                                      | 0.35 lb/T P25 (pouring)<br>2.2 lb/T P26 (cooling) = 2.55 lb/T | 2.2 lb/T<br>Sand handling & shakeout   | 4.75 lb/T       |
| Waupaca Foundry, Inc. – Plant 6, McMinn, TN                   | 6.0 lb/T per line<br>Mold cooling & shakeout lines 1 & 2      | 0.6 lb/T<br>Mold cooling & shakeout lines 1 & 2  | 6.6 lb/T        |
| Waupaca Foundry, Inc. – Plant 6, McMinn, TN                   | 6.0 lb/T per line<br>Mold cooling & shakeout lines 3 & 4      | 0.6 lb/T<br>Mold cooling & shakeout lines 3 & 4  | 6.6 lb/T        |
| Brillion Iron Works, Calumet, WI                              | 8.0 lb/T  | N/A  | 8.0 lb/T        |

\* Note: Limits for pouring/cooling and shakeout were permitted in separate approvals.

As seen in Tables 1, 2 and 3 above, other sources have more stringent VOC limits for BACT for their pouring and cooling process and shakeout process. These more stringent VOC limits for the pouring and cooling process and the shakeout process, where only one other requires add-on VOC controls, were not considered as BACT for these processes for the following reasons.

The manufacturer of the proposed AO system guarantees a VOC reduction of 20% for the greensand system only. INTAT produces both cored and non-cored product. VOC emissions from the core material are not addressed by this guaranteed emission reduction. It is therefore difficult to predict the overall emission rate that could be achieved by the system when cored product is produced. INTAT's proposed emission limit of 1.2 pound per ton of metal throughput was determined by looking at the September, 2005 stack test results corrected for methane, as discussed in the following paragraphs, from the cored production (1.4 pounds VOC per ton metal), and applying a 20% reduction for the AO system for a value of 1.12 pounds VOC per ton metal. Due to the uncertainties in determining this number (based on test methods, methane correction, etc.), the proposed emission limit is 1.2 pounds VOC per ton of metal throughput.

The testing that was conducted in September, 2005 included different test methods (Method 25 vs. Method 25A) and the tests included testing done on both cored and non-cored product. The test results showed significant differences depending on the specific test used, whether the testing was on cored or non-cored work, and also by the presence of Methane which was not corrected for in all of the test results. As discussed in this assessment, the benefits of different control technologies may differ on cored vs. non-cored material. Since the emission limit in the permit will have to be met on cored product as the worst case, INTAT has used data gathered for both the cored and non-cored tests as part of this assessment.

The highest values from the testing conducted were based on Method 25 results for the cored product from the cooling and shakeout processes and from Method 25A on cored product from the pouring process. The use of Method 25 vs. Method 25A is based on the VOC concentration measured. At concentrations above 50 ppm as Carbon (or 16 ppm as propane), Method 25 is the required test method. At concentrations below these values, Method 25A is used. Since it is anticipated that future controls may reduce the VOC concentration, and since the concentrations experienced during the testing were near these thresholds, it would be anticipated that Method 25A may be the test method for compliance purposes in the future. As such INTAT has reviewed the test data to better understand the level of control that may be achievable. The one other factor that must be considered is the potential impact of methane (a non-VOC) on the test results. Method 25 measures Methane separately and reports only non-Methane in the test results. Method 25A does not measure Methane, and the Methane level must be subtracted out. This correction was not included in the test report for the cooling and shakeout process (although the data were available) and could not be included in the pouring test results, since Methane levels were not measured.

If the Method 25A test results are used with a correction for Methane, the cored product test results would have shown a value of 1.03 lbs/ton for the cooling and shakeout process and a value of 0.34 lbs/ton (without the Methane correction) for pouring, for a total value of approximately 1.4 lbs VOC/ton of metal. For the non-cored tests, the Methane corrected Method 25A results showed a result of 0.7 lbs/ton for the cooling and shakeout processes, and with the same test result (not corrected for Methane) from the cored pouring test, the total pouring, cooling, and shakeout would have shown a result of 1.04 lbs/ton.

This discussion of the range of test results is intended to aid in ensuring that the BACT assessments are made with a full understanding of the results, and to aid in the selection of an appropriate proposed emission limit. For the purposes of the BACT assessment for the use of add-on controls, INTAT has used the value of 2.28 lbs/ton in order to conservatively estimate the cost effectiveness of those controls as discussed later in this analysis. However, in selecting a target emission limit for the use of the Advanced Oxidation system the proposed emission limit is based on a consideration of all of these test results.

Additionally, most of the other sources identified in the above tables have separate VOC limits for their pouring and cooling process and the shakeout process. However, INTAT has proposed a combined VOC limit for the pouring and cooling process and shakeout process. Separate VOC limits are not proposed for the pouring and cooling process and the shakeout process because INTAT has proposed to install a common VOC control system (AO system) for the processes and therefore it will be easier to determine compliance with a VOC limit if the limit is applied to pouring and cooling and the shakeout processes combined. Other VOC control devices with higher control efficiencies have been shown to be economically infeasible as shown in Step 4 below. Therefore, it is not possible for INTAT to accept a more stringent BACT limit.

A review of BACT/LAER Clearinghouse and other appropriate references indicates the control options listed and discussed below may be applicable.

*Control Alternatives: Material Substitution, Lower-Emitting Processes/Practices*

There has been work done over the past several years to identify potential changes in materials and processes to bring about a reduction in organic Hazardous Air Pollutants (HAPs) and VOCs from the use of newer materials. Studies have also been conducted to specifically evaluate the impact of various process variables in the casting process that may also affect the emissions of VOCs and organic HAPs. INTAT has met with its material suppliers and is currently using lower emitting binders and the emission results were obtained using these materials. Additionally, INTAT operates the facility in such a manner as to limit its VOC emissions.

*Innovative Technologies: Advanced Oxidation*

INTAT also evaluated the use of Advanced Oxidation (AO) - sonication and optimization of the sand system. The AO system operates by the incorporation of ozone and hydrogen peroxide in the water supply to the muller, which is further acted on by acoustic sonication. The system must be incorporated over time to achieve a stable sand system through the operation of the casting line. As the system acclimates to the AO system, the bond characteristics change, and it is necessary to reduce the amount of bond additives (clay and sea coal mix) to maintain the desired bond strength.

Currently, the only supplier of the AO system is Furness-Newburge, Inc. (FNI). INTAT contracted with FNI to conduct a study specific to the INTAT facility to determine if it is feasible to utilize the AO system. FNI completed its study and concluded that the AO system can guarantee INTAT a 20% reduction in VOC emissions from its greensand system. It is important to note that the AO system is primarily effective in lowering VOC emissions from the greensand system but will have an appreciable impact on reducing VOCs from the core materials. INTAT's production consists of both cored and non-cored product. VOC emissions from the core material are not addressed by this guaranteed emission reduction. It is therefore difficult to predict the overall emission rate that could be achieved by the system when cored product is produced.

*Add-on Control Technologies: Regenerative Thermal Oxidizer (RTO)*

As shown on the tables above, add-on controls, such as a Regenerative Thermal Oxidizer (RTO), are not used in practice on other green sand systems, but the use of an RTO has been evaluated as a technically feasible alternative. While the most stringent limits found in the review of issued permits did not rely on the use of add-on controls such as an RTO, INTAT conducted an assessment of the cost effectiveness of the use of an RTO to control VOCs from the pouring process (following Baghouse DC-3B) and the cooling and shakeout processes (following BH 6200).

**Step 2 – Technically Feasible Analysis of BACT Options**

For a BACT option to be technically feasible two important key concepts should be considered. The concepts are "availability" and "applicability". A control technology is considered "available" if it can be obtained by the applicant through commercial channels or is otherwise available within the common sense meaning of the term. An available technology is "applicable" if it can reasonably be installed and operated on the source type under consideration. A control technology that is available and applicable is technically feasible.

Besides Advanced Oxidation, the RTO is the only control option that would offer a moderate or high degree of technical feasibility. Other possible control technologies would include catalytic incineration, flare, and carbon adsorption. Typical problems encountered when using a catalytic incinerator or carbon adsorption are the contaminants in the exhaust stream can poison or foul the catalyst bed. Given the nature of foundry operations, this is a serious problem. Therefore, these options were not considered technically feasible. A flare is not technically feasible because the exhaust stream concentration must be high enough to sustain combustion, requiring a VOC inlet concentration of greater than 13,000 ppm, which is not feasible in INTAT's pouring, cooling and shakeout operations.

INTAT considered the following BACT options which are found to be technically feasible:

- (a) Regenerative Thermal Oxidizer
- (b) Advanced Oxidation

### **Step 3 – Ranking of Technically Feasible BACT Options**

Ranking of technically feasible BACT options involves the following considerations:

- (a) expected emission rate (tons per year, pounds per hour);
- (b) emission performance level (e.g. percent pollutant removed, emissions per unit product, lb/MMBtu, ppm);
- (c) expected emission reduction (tons per year)
- (d) economic impacts (total annualized costs, cost effectiveness, incremental cost effectiveness);
- (e) environmental impacts (includes any significant or unusual other media impacts (e.g., water or solid waste), and the relative ability of each control alternative to control emissions of toxic or hazardous air contaminants); and
- (f) energy impacts (indicate any significant energy benefits or disadvantages).

#### **Ranking based on emission rate, emission performance level and expected emission reduction**

The table below lists the two technically feasible BACT options (identified in Step 2) ranked in descending order of Overall System Pollution Reduction Efficiency:

| <b>BACT Option</b>            | <b>Overall System Pollution Reduction Efficiency (%)</b> |
|-------------------------------|--|
| Regenerative Thermal Oxidizer | 97*  |
| Advanced Oxidation            | 20   |

\* The VOC overall control efficiency for the RTO is based on a 99% capture efficiency (a conservative estimate) and a typical destruction efficiency of 98% (99% capture efficiency x 98% destruction efficiency = 97% overall control efficiency).

### **Step 4 – The BACT Selection Process**

A cost effectiveness analysis was performed by INTAT for the use of one RTO to control VOC emissions from pouring and another RTO to control VOC emissions from cooling and shakeout. The results are shown below in Tables 4 and 5. An additional cost analysis was performed for the use of one RTO to control VOC emissions from pouring, cooling and shakeout combined. The cost analysis for one RTO controlling emissions from all three processes conservatively assumes that the flow rate for the three processes combined would be the same as the flow rate to combine cooling and shakeout. In reality, the flow rate would need to be increased which would lead to an increase in costs. The results are shown in Table 6. For the purposes of this evaluation, a conservative approach was taken and the highest calculated emission rate was used: 2.28 pound VOC per ton metal based on the September 2005 testing discussed previously. Based on the test results for the cored product, INTAT has used a value of 0.3 lbs/ton for pouring and a value of 2.0 lbs/ton for cooling and shakeout. The current permit includes a production limit of 79,000 tons of metal per year, such that the uncontrolled emissions from pouring would be 11.85 tons per year (tpy) and from cooling and shakeout would be 79.0 tpy.

**Emissions Used for Cost Effectiveness Analysis**

| Operation                              | VOC Emission Factor (lb/ton metal) | Metal Throughput Limit (tons/yr) | VOC Emissions (tons/yr) |
|--|------------------------------------|----------------------------------|-------------------------|
| Pouring station (P13B)                 | 0.3                                | 79,000                           | 11.85                   |
| Cooling line (P14B)                    | 2.0                                | 79,000                           | 79.0                    |
| Shakeout operations (P16B)             |                                    |                                  |                         |
| Pouring, Cooling and Shakeout Combined | 2.3                                | 79,000                           | 90.85                   |

**Table 4: Cost/Economic Analysis for Regenerative Thermal Oxidizer for Pouring Process**

| <b>A. Direct Capital Cost</b>                                      |                    |  |
|--|--------------------|--|
| Item   | Cost Estimate      | Reference/Source of Cost Estimate          |
| <b>Purchase Equipment Costs</b>                                    |                    |  |
| 1. Equipment Cost<br>60000 cfm Regenerative Thermal Oxidizer       | \$1,237,204        | Vendor Quote                               |
| 2. Instrumentation/controls  | \$                 | Included in Quote                          |
| 3. Sales Tax   | \$ 61,860          | EPA Cost Manual Table 2.8                  |
| 4. Freight   | \$ 61,860          | EPA Cost Manual Table 2.8                  |
| 5. Other   | \$                 |  |
| <b>6. Purchased Equipment Subtotal</b>                             | <b>\$1,360,924</b> |  |
| <b>Direct Installation Costs</b>                                   |                    |  |
| 7. Foundations and Supports  | \$                 | Included in Quote                          |
| 8. Erection/Handling   | \$                 | Included in Quote                          |
| 9. Electrical  | \$                 | Included in Quote                          |
| 10. Piping   | \$ 27,218          | EPA Cost Manual Table 2.8                  |
| 11. Insulation   | \$ 13,609          |  |
| 12. Painting   | \$ 13,609          |  |
| 13. Other  | \$                 |  |
| <b>14. Direct Installation Costs Subtotal</b>                      | <b>\$ 54,437</b>   |  |
| <b>15. Direct Capital Cost Subtotal</b>                            | <b>\$1,415,361</b> |  |
| <b>B. Indirect Installation Costs</b>                              |                    |  |
| 1. Engineering and Supervision                                     | \$ 136,092         | EPA Cost Manual Table 2.8                  |
| 2. Construction and Field Expenses                                 | \$ 68,046          |  |
| 3. Construction Fees   | \$ 136,092         |  |
| 4. Start-up  | \$ 27,218          |  |
| 5. Performance Test  | \$ 10,000          | Engineering Estimate                       |
| 6. Contingencies   | \$ 40,828          | EPA Cost Manual Table 2.8                  |
| 7. Other   |                    |  |
| <b>8. Indirect Installation Costs Subtotal</b>                     | <b>\$ 418,277</b>  |  |
| <b>C. Total Capital Cost</b>                                       | <b>\$1,833,639</b> |  |
| <b>D. Direct Annual Cost</b>                                       |                    |  |
| 1. Operating Labor<br>Operator (@ \$24.00 per hour x 547.5 hrs/yr) | \$ 13,140          | EPA Guidance – 0.5 hr per shift per device |
| Supervision (15% of labor)   | \$ 1,971           | EPA Cost Manual                            |

|  |                         |  |
|--|-------------------------|--|
| 2. Maintenance Labor<br>Maintenance Labor (@ \$40.00 per hour x 547.5 hrs/yr)<br>Maintenance Materials (100% of labor) | \$ 21,900<br>\$ 21,900  |  |
| 3. Replacement parts (as required)   | \$ 61,860               | 5% of equipment costs                        |
| 4. Utilities<br>Gas & Electric<br>(Gas @ \$7 / kCF)<br>(Electricity @ \$0.036 /kw)                                     | \$ 283,015<br>\$ 16,399 | EPA Cost Manual<br>EPA Cost Manual page 2-43 |
| 5. Other   |                         |  |
| <b>6. Direct Annual Cost Subtotal</b>  | <b>\$ 420,185</b>       |  |
| <b>E. Indirect Annual Costs</b>  |                         |  |
| 1. Overhead  | \$ 35,347               | EPA Cost Manual                              |
| 2. Property Taxes  | \$ 18,336               |  |
| 3. Insurance   | \$ 18,336               |  |
| 4. Administration  | \$ 36,673               |  |
| 5. Capital Recovery<br>a. Interest Rate<br>b. Economic Lifetime  | 7%<br>10 years          |  |
| 6. CAPITAL RECOVERY COST   | \$ 261,069              | EPA Cost Manual                              |
| 7. Other   |                         |  |
| <b>8. Indirect Annual Cost Subtotal</b>  | <b>\$ 369,761</b>       |  |
| <b>F. Recovery Credits</b>   |                         |  |
| 1. Materials Recovered   | \$                      |  |
| 2. Energy Recovered  | \$                      |  |
| 3. Other   | \$                      |  |
| 4. Recovery Credits Subtotal   | \$                      |  |
| <b>G. Total Annualized Cost Summary</b>  |                         |  |
| 1. Direct Annual Costs Subtotal  | \$ 420,185              |  |
| 2. Indirect Annual Costs Subtotal  | \$ 357,825              |  |
| 3. Recovery Credits Subtotal   | \$                      |  |
| <b>4. Total Annualized Cost (TAC)</b>  | <b>\$ 789,946</b>       |  |
| <b>H. Cost Effectiveness</b>   |                         |  |
| 1. Baseline Emissions Rate (tons/year)   | 11.85                   |  |
| 2. Post –BACT Emissions Rate (tons/year)   | 0.36                    |  |
| 3. Total Pollution Removed (tons/year)   | 11.49                   |  |
| <b>4. Average Cost Effectiveness of BACT Option (\$/ton) (G4 ÷ H3)</b>   | <b>\$ 68,751</b>        |  |

"EPA Air Pollution Control Cost Manual, Sixth Edition", EPA-452-02-001, January 2002

Note: Emissions are based on an emission factor of 0.3 lb/ton for pouring and a production limit of 79,000 tons per year.

**Table 5: Cost/Economic Analysis for Regenerative Thermal Oxidizer for Cooling and Shakeout Processes**

| <b>A. Direct Capital Cost</b>  |                         |   |
|--|-------------------------|---|
| <b>Item</b>  | <b>Cost Estimate</b>    | <b>Reference/Source of Cost Estimate</b>                      |
| <b>Purchase Equipment Costs</b>  |                         |   |
| 1. Equipment Cost<br>111,000 cfm Regenerative Thermal Oxidizer   | \$1,295,700             | Vendor Quote  |
| 2. Instrumentation/controls  | \$                      | Included in Quote   |
| 3. Sales Tax   | \$ 64,785               | EPA Cost Manual Table 2.8                                     |
| 4. Freight   | \$ 64,785               | EPA Cost Manual Table 2.8                                     |
| 5. Other   | \$                      |   |
| <b>6. Purchased Equipment Subtotal</b>   | <b>\$1,425,270</b>      |   |
| <b>Direct Installation Costs</b>   |                         |   |
| 7. Foundations and Supports  | \$ 114,022              | EPA Cost Manual Table 2.8                                     |
| 8. Erection/Handling   | \$ 199,538              |   |
| 9. Electrical  | \$ 57,011               |   |
| 10. Piping   | \$ 28,505               | EPA Cost Manual Table 2.8                                     |
| 11. Insulation   | \$ 14,253               |   |
| 12. Painting   | \$ 14,253               |   |
| 13. Other  | \$                      |   |
| <b>14. Direct Installation Costs Subtotal</b>  | <b>\$ 427,581</b>       |   |
| <b>15. Direct Capital Cost Subtotal</b>  | <b>\$1,852,851</b>      |   |
| <b>B. Indirect Installation Costs</b>  |                         |   |
| 1. Engineering and Supervision   | \$ 142,527              | EPA Cost Manual Table 2.8                                     |
| 2. Construction and Field Expenses   | \$ 71,264               |   |
| 3. Construction Fees   | \$ 142,527              |   |
| 4. Start-up  | \$ 28,505               |   |
| 5. Performance Test  | \$ 10,000               | Engineering Estimate  |
| 6. Contingencies   | \$ 42,758               | EPA Cost Manual Table 2.8                                     |
| 7. Other   |                         |   |
| <b>8. Indirect Installation Costs Subtotal</b>   | <b>\$ 437,581</b>       |   |
| <b>C. Total Capital Cost</b>   | <b>\$2,290,432</b>      |   |
| <b>D. Direct Annual Cost</b>   |                         |   |
| 1. Operating Labor<br>Operator (@ \$24.00 per hour x 547.5 hrs/yr)<br>Supervision (15% of labor)                       | \$ 13,140<br>\$ 1,971   | EPA Guidance – 0.5 hr per shift per device<br>EPA Cost Manual |
| 2. Maintenance Labor<br>Maintenance Labor (@ \$40.00 per hour x 547.5 hrs/yr)<br>Maintenance Materials (100% of labor) | \$ 21,900<br>\$ 21,900  |   |
| 3. Replacement parts (as required)   | \$ 64,785               | 5% of equipment costs   |
| 4. Utilities<br>Gas & Electric<br>(Gas @ \$7 / kCF)<br>(Electricity @ \$0.036 /kw)                                     | \$ 523,578<br>\$ 30,338 | EPA Cost Manual<br>EPA Cost Manual page 2-43                  |
| 5. Other   |                         |   |

|  |                    |                 |
|--|--------------------|-----------------|
| <b>6. Direct Annual Cost Subtotal</b>                                  | <b>\$ 677,612</b>  |                 |
| <b>E. Indirect Annual Costs</b>  |                    |                 |
| 1. Overhead  | \$ 35,347          | EPA Cost Manual |
| 2. Property Taxes  | \$ 22,904          |                 |
| 3. Insurance   | \$ 22,904          |                 |
| 4. Administration  | \$ 45,809          |                 |
| 5. Capital Recovery<br>a. Interest Rate<br>b. Economic Lifetime        | 7%<br>10 years     |                 |
| 6. CAPITAL RECOVERY COST   | \$ 326,106         | EPA Cost Manual |
| 7. Other   |                    |                 |
| <b>8. Indirect Annual Cost Subtotal</b>                                | <b>\$ 453,070</b>  |                 |
| <b>F. Recovery Credits</b>   |                    |                 |
| 1. Materials Recovered   | \$                 |                 |
| 2. Energy Recovered  | \$                 |                 |
| 3. Other   | \$                 |                 |
| 4. Recovery Credits Subtotal   | \$                 |                 |
| <b>G. Total Annualized Cost Summary</b>                                |                    |                 |
| 1. Direct Annual Costs Subtotal  | \$ 677,612         |                 |
| 2. Indirect Annual Costs Subtotal                                      | \$ 438,105         |                 |
| 3. Recovery Credits Subtotal   | \$                 |                 |
| <b>4. Total Annualized Cost (TAC)</b>                                  | <b>\$1,130,682</b> |                 |
| <b>H. Cost Effectiveness</b>   |                    |                 |
| 1. Baseline Emissions Rate (tons/year)                                 | 79.00              |                 |
| 2. Post –BACT Emissions Rate (tons/year)                               | 2.37               |                 |
| 3. Total Pollution Removed (tons/year)                                 | 76.63              |                 |
| <b>4. Average Cost Effectiveness of BACT Option (\$/ton) (G4 ÷ H3)</b> | <b>\$ 14,755</b>   |                 |

“EPA Air Pollution Control Cost Manual, Sixth Edition”, EPA-452-02-001, January 2002  
 Note: Emissions are based on an emission factor of 2.0 lb/ton for cooling and shakeout and a production limit of 79,000 tons per year.

**Table 6: Cost/Economic Analysis for Regenerative Thermal Oxidizer for Pouring, Cooling and Shakeout Processes Combined**

|  |                      |  |
|--|----------------------|--|
| <b>A. Direct Capital Cost</b>                                  |                      |  |
| <b>Item</b>  | <b>Cost Estimate</b> | <b>Reference/Source of Cost Estimate</b> |
| <b>Purchase Equipment Costs</b>                                |                      |  |
| 1. Equipment Cost<br>111,000 cfm Regenerative Thermal Oxidizer | \$1,295,700          | Vendor Quote                             |
| 2. Instrumentation/controls                                    | \$                   | Included in Quote                        |
| 3. Sales Tax   | \$ 64,785            | EPA Cost Manual Table 2.8                |
| 4. Freight   | \$ 64,785            | EPA Cost Manual Table 2.8                |
| 5. Other   | \$                   |  |
| <b>6. Purchased Equipment Subtotal</b>                         | <b>\$1,425,270</b>   |  |
| <b>Direct Installation Costs</b>                               |                      |  |
| 7. Foundations and Supports                                    | \$ 114,022           | EPA Cost Manual Table 2.8                |
| 8. Erection/Handling   | \$ 199,538           |  |

|   |                    |   |
|---|--------------------|---|
| 9. Electrical   | \$ 57,011          |   |
| 10. Piping  | \$ 28,505          | EPA Cost Manual Table 2.8                                     |
| 11. Insulation  | \$ 14,253          |   |
| 12. Painting  | \$ 14,253          |   |
| 13. Other   | \$                 |   |
| <b>14. Direct Installation Costs Subtotal</b>                                 | <b>\$ 427,581</b>  |   |
| <b>15. Direct Capital Cost Subtotal</b>                                       | <b>\$1,852,851</b> |   |
| <b>B. Indirect Installation Costs</b>   |                    |   |
| 1. Engineering and Supervision  | \$ 142,527         | EPA Cost Manual Table 2.8                                     |
| 2. Construction and Field Expenses  | \$ 71,264          |   |
| 3. Construction Fees  | \$ 142,527         |   |
| 4. Start-up   | \$ 28,505          |   |
| 5. Performance Test   | \$ 10,000          | Engineering Estimate  |
| 6. Contingencies  | \$ 42,758          | EPA Cost Manual Table 2.8                                     |
| 7. Other  |                    |   |
| <b>8. Indirect Installation Costs Subtotal</b>                                | <b>\$ 437,581</b>  |   |
| <b>C. Total Capital Cost</b>  | <b>\$2,290,432</b> |   |
| <b>D. Direct Annual Cost</b>  |                    |   |
| 1. Operating Labor<br>Operator (@ \$24.00 per hour x 547.5 hrs/yr)            | \$ 13,140          | EPA Guidance – 0.5 hr per shift per device<br>EPA Cost Manual |
| Supervision (15% of labor)  | \$ 1,971           |   |
| 2. Maintenance Labor<br>Maintenance Labor (@ \$40.00 per hour x 547.5 hrs/yr) | \$ 21,900          |   |
| Maintenance Materials (100% of labor)   | \$ 21,900          |   |
| 3. Replacement parts (as required)  | \$ 64,785          | 5% of equipment costs   |
| 4. Utilities<br>Gas & Electric<br>(Gas @ \$7 / kCF)                           | \$ 523,578         | EPA Cost Manual<br>EPA Cost Manual page 2-43                  |
| (Electricity @ \$0.036 /kw)   | \$ 30,338          |   |
| 5. Other  |                    |   |
| <b>6. Direct Annual Cost Subtotal</b>   | <b>\$ 677,612</b>  |   |
| <b>E. Indirect Annual Costs</b>   |                    |   |
| 1. Overhead   | \$ 35,347          | EPA Cost Manual   |
| 2. Property Taxes   | \$ 22,904          |   |
| 3. Insurance  | \$ 22,904          |   |
| 4. Administration   | \$ 45,809          |   |
| 5. Capital Recovery<br>a. Interest Rate                                       | 7%                 |   |
| b. Economic Lifetime  | 10 years           |   |
| 6. CAPITAL RECOVERY COST  | \$ 326,106         | EPA Cost Manual   |
| 7. Other  |                    |   |
| <b>8. Indirect Annual Cost Subtotal</b>                                       | <b>\$ 453,070</b>  |   |
| <b>F. Recovery Credits</b>  |                    |   |
| 1. Materials Recovered  | \$                 |   |
| 2. Energy Recovered   | \$                 |   |
| 3. Other  | \$                 |   |

|  |                    |  |
|--|--------------------|--|
| 4. Recovery Credits Subtotal   | \$                 |  |
| <b>G. Total Annualized Cost Summary</b>                                |                    |  |
| 1. Direct Annual Costs Subtotal  | \$ 677,612         |  |
| 2. Indirect Annual Costs Subtotal                                      | \$ 438,105         |  |
| 3. Recovery Credits Subtotal   | \$                 |  |
| <b>4. Total Annualized Cost (TAC)</b>                                  | <b>\$1,130,682</b> |  |
| <b>H. Cost Effectiveness</b>   |                    |  |
| 1. Baseline Emissions Rate (tons/year)                                 | 90.85              |  |
| 2. Post –BACT Emissions Rate (tons/year)                               | 2.73               |  |
| 3. Total Pollution Removed (tons/year)                                 | 88.12              |  |
| <b>4. Average Cost Effectiveness of BACT Option (\$/ton) (G4 ÷ H3)</b> | <b>\$ 12,831</b>   |  |

"EPA Air Pollution Control Cost Manual, Sixth Edition", EPA-452-02-001, January 2002

Note: Emissions are based on an emission factor of 2.3 lb/ton for pouring, cooling and shakeout combined and a production limit of 79,000 tons per year.

The estimated total capital cost was calculated using direct and indirect installation costs. The basic equipment costs were obtained from vendor's quoted prices. Annualized costs were developed based on information from vendors. The analysis assumed an interest rate of 7.0% and an equipment life of 10 years.

The basis of cost effectiveness, used to evaluate the control options, is the ratio of the annualized cost to the amount of VOC (tons) removed per year. From table 4 above, it shows that the Regenerative Thermal Oxidizer for the pouring process would cost \$68,751 per ton of VOC with 11.49 tons per year of VOC reduction from the baseline emission rate of 11.85 tons per year having an overall control efficiency of 97%. The Regenerative Thermal Oxidizer for the cooling and shakeout processes would cost \$14,755 per ton of VOC with 76.63 tons per year of VOC reduction from the baseline emission rate of 79.0 tons per year having an overall control efficiency of 97%. The Regenerative Thermal Oxidizer for the pouring, cooling and shakeout processes combined would cost \$12,831 per ton of VOC with 88.12 tons per year of VOC reduction from the baseline emission rate of 90.85 tons per year having an overall control efficiency of 97%.

Economic Analysis: The following table summarizes cost/economic impacts for each option

| <b>BACT Option</b>   | <b>Total Annualized Cost (TAC) (\$/year)</b> | <b>Cost Effectiveness (\$/ton)</b> |
|--|--|------------------------------------|
| Regenerative Thermal Oxidizer for Pouring Process                                  | 789,946                                      | 68,751                             |
| Regenerative Thermal Oxidizer for Cooling and Shakeout Processes                   | 1,130,682                                    | 14,755                             |
| Regenerative Thermal Oxidizer for Pouring, Cooling and Shakeout Processes Combined | 1,130,682                                    | 12,831                             |

**Step 5 – Selecting BACT**

IDEM, OAQ has determined that based on the economic analysis above, the use of regenerative thermal oxidizers to control VOC emissions from the pouring, cooling, and shakeout operations is not a cost effective control option.

FNI guarantees a VOC reduction of 20% for the greensand system only. INTAT produces both cored and non-cored product so the VOC emissions from the core material would not be addressed by this guaranteed emission reduction. The RBLC database does not provide detailed information about the specific products (i.e., cored or non-cored products), which would give different results.

INTAT proposed a limit of 1.2 lbs/ton of metal based on the stack test results for the pouring, cooling and shakeout.

Therefore, the following has been determined to be BACT for the Pouring (P13B), Cooling (P14B), Shakeout (P16B) and bad heat shakeout processes:

- (a) The use of Material Substitution and Lower-Emitting Processes/Practices to limit VOC emissions;
- (b) The installation of an of Advanced Oxidation (AO) system with a minimum VOC reduction efficiency of 20%; and
- (c) A VOC emission limit of 1.2 pounds per ton of metal throughput to the pouring, cooling and shakeout operations (P13B, P14B, and P16B) and bad heat shakeout operations combined.
- (d) The throughput of metal to the pouring, cooling and shakeout operations (P13B, P14B, and P16B) and bad heat shakeout operations combined shall not exceed 79,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

The AO system shall be installed according to the following schedule:

- |                                 |   |
|---------------------------------|---|
| Day 1:                          | Permit issuance.  |
| 30 days after permit issuance:  | INTAT will issue a purchase order for the AO system.  |
| 130 days after permit issuance: | Site delivery of AO system equipment.   |
| 160 days after permit issuance: | 90% of the installation will be complete. Remaining installation must be completed during Plant Shutdown.   |
| July, 2008 Plant Shutdown:      | AO system will be connected to INTAT's sand cooling and dust collection systems.  |
| 14 Days after Plant Shutdown:   | Begin Cleanwater Phase (Normal tap water run through system to verify system integrity and no process issues).  |
| 35 Days after Plant Shutdown:   | Begin Clearwater Phase (Hydrogen peroxide slowly introduced to system, slow incremental changes made to sand system to accommodate peroxide effects). |
| 73 Days after Plant Shutdown:   | Start Blackwater Phase (Dust slowly introduced to AO system, slow incremental changes made to sand system to accommodate effects).                    |
| 101 Days after Plant Shutdown:  | Monitor system for stability issues, effects on part quality.   |
| 250 Days after Plant Shutdown:  | Stack testing will be completed.  |

## **Appendix C**

### **Additional Impact Analysis**

As part of a PSD analysis, an applicant is required to analyze whether its proposed emissions increases would impair visibility, or adversely effect soils or vegetation. Not only must the applicant look at the direct effect of source emissions on these resources, but it also must consider the indirect impacts from general commercial, residential, industrial and other growth associated with the proposed source or modification.

This section describes the project's impact on growth, soils, vegetation and visibility in the vicinity of the foundry.

#### **CONSTRUCTION AND GROWTH IMPACTS**

The foundry is an existing source and since the facility has already been constructed there are no future impacts from construction activities. Commercial growth in the area is anticipated to occur at a gradual rate in the future. Each major new source will be required to undergo PSD review; however, commercial growth will add to the background pollutant concentrations.

#### **IMPACT ON SOILS AND VEGETATION**

According to the 1978 Rush County Soil Survey Map, published by the U.S. Department of Agriculture Soil Conservation Service, one (1) type of native soil exists under the facility. The native soil is Celina silt loam (CeB2). Celina silt loam soils are gently sloping, deep, moderately well drained soil. This type of soil is characterized as having 2-6 percent slopes, eroded. The foundry is located in an area that is primarily agricultural and corn, soy beans and wheat are the primary crops.

The secondary NAAQS are intended to protect the public welfare from adverse effects of airborne effluents. This protection extends to agricultural soil and vegetation. For VOCs the primary NAAQS for Ozone is equal to the secondary NAAQS. The effects of gaseous air pollutants on vegetation may be classified into three rather broad categories: acute, chronic, and long-term. Acute effects are those that result from relatively short (less than 1 month) exposures to high concentrations of pollutants. Chronic effects occur when organisms are exposed for months or even years to certain threshold levels of pollutants. Long-term effects include abnormal changes in ecosystems and subtle physiological alterations in organisms. Acute and chronic effects are caused by the gaseous pollutant acting directly on the organism, whereas long-term effects may be indirectly caused by secondary agents such as changes in soil pH.

The anticipated level of VOCs from the casting line are very small in comparison to the total level of VOCs in the upwind areas, and it is not expected that measurable increases in ozone levels will occur as a result of the VOC emissions from the casting line. As such, no significant adverse impacts on soils or vegetation are anticipated due to the proposed modification.

### **ANALYSIS OF ENDANGERED SPECIES**

Federal and State endangered species are listed by the U.S. Fish and Wildlife Service and include 5 amphibians, 27 birds, 10 fish, 7 mammals, 15 mollusks and 15 reptiles. The foundry is an existing facility located in at the edge of mid size town. The maximum air quality impact of the foundry operations is located very close to the facility's fence line. The maximum pollutant concentrations are in compliance with PSD increments and NAAQS. Since the proposed modification is to an existing facility, there will be no additional disturbance of existing habitat and therefore it is highly unlikely that the proposed modification will adversely affect the habitats of endangered species in the area.

### **IMPACT ON VISIBILITY**

Any facility emitting significant amounts of PM<sub>10</sub>, SO<sub>2</sub> and NO<sub>x</sub> has the potential to create adverse impacts on visibility through atmospheric discoloration and reduction of visual range due to increased amounts of haze. The emission units associated with Casting Line 2 will generate very low levels of SO<sub>2</sub> and NO<sub>x</sub>, and the proposed modifications are not subject to the PSD requirements for PM<sub>10</sub>. Line 2 was subject to the PSD requirements as part of a previous permit review. The PM<sub>10</sub> emissions are controlled by several baghouses and filters to minimize their impact, including the impact on visibility. The facility is also subject to state opacity limits and as part of the foundry MACT standard, and is required to meet opacity limits for fugitive particulate emissions from the buildings housing the foundry operations. These limits reduce the events of visible plumes, thus visibility impacts in the immediate vicinity should be negligible. The nearest Class I area is Mammoth Cave National Park, located more than 100 kilometers from the site. Therefore, no Class I visibility assessment is required.