



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We Protect Hoosiers and Our Environment.*

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(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

**Michael R. Pence**  
*Governor*

**Thomas W. Easterly**  
*Commissioner*

TO: Interested Parties / Applicant  
DATE: July 30, 2013  
RE: The Ford Meter Box Company, Inc / 169-32985-00003  
FROM: Matthew Stuckey, Branch Chief  
Permits Branch  
Office of Air Quality

## Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, 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



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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Mr. John Flesher  
Ford Meter Box Company, Inc.  
775 Manchester Avenue  
Wabash, Indiana 46992-1420

July 30, 2013

Re: 169-32985-00003  
Significant Source Modification to  
Part 70 No.: T169-25077-00003

Dear Mr. Flesher:

Ford Meter Box Company, Inc. was issued Part 70 Operating Permit No. T169-25077-00003, on December 8, 2009, for a stationary captive brass foundry located at 775 Manchester Avenue, Wabash, Indiana 46992-1420. An application to modify the source was received on March 21, 2013. Pursuant to the provisions of 326 IAC 2-7-10.5, a significant source modification to this permit is hereby approved as described in the attached Technical Support Document.

Pursuant to 326 IAC 2-7-10.5, the following emission units are approved for construction and modification at the source:

#### Modified Emission Units:

- (e) One (1) Iron Room for cast iron grinding, boring, and tapping operations, identified as Unit #5, constructed in 1973 and approved for modification in 2013, with a maximum throughput of 0.78 tons per hour, using portable fabric filters as control, exhausting inside the building.
- (m) Various machining, grinding, and polishing operations, identified as Unit #26, constructed in 1999 and approved for modification in 2013, with a maximum throughput of 2.238 tons per hour, using Baghouse "BC" for capturing brass chips to be recycled as well as for controlling dust emissions, exhausting to Stack "BC." The exhaust gas is vented through a drop box to reduce particulate loading and then to the baghouse;

#### New Emission Units:

- (u) One (1) Didion rotary metal reclaimer, approved for construction in 2013, with a maximum throughput of 2.00 tons of metal per hour, using Baghouse "G" for particulate emissions control, exhausting to Stack "G."

The following construction conditions are applicable to the proposed modification:

#### General Construction Conditions

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

2. This approval to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.
3. Effective Date of the Permit  
Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.
4. Commenced Construction  
Pursuant to 326 IAC 2-1.1-9 and 326 IAC 2-7-10.5(j), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.
5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.
6. Pursuant to 326 IAC 2-7-10.5(m), the emission units constructed under this approval shall not be placed into operation prior to revision of the source's Part 70 Operating Permit to incorporate the required operation conditions.
7. Approval to Construct  
Pursuant to 326 IAC 2-7-10.5(h)(2), this significant source modification authorizes the construction of the new emission unit(s), when the significant source modification has been issued.

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

A copy of the permit is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>. For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: [www.idem.in.gov](http://www.idem.in.gov)

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5.

If you have any questions on this matter, please contact David Matousek, of my staff, at 317-232-8253 or 1-800-451-6027, and ask for extension 2-8253.

Sincerely,



Nathan Bell, Section Chief  
Permits Branch  
Office of Air Quality

Attachments: Updated Permit, Technical Support Document and Appendix A

NB/djm

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



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Commissioner

**Significant Source Modification  
to a Part 70 Source**

**OFFICE OF AIR QUALITY**

**Ford Meter Box Company, Inc.  
775 Manchester Drive  
Wabash, Indiana 46992**

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

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

Significant Source Modification No. 169-32985-00003

Issued by:

Nathan Bell, Section Chief  
Permits Branch  
Office of Air Quality

Issuance Date: July 30, 2013

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**Attachment B - 40 CFR 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines)**

## SECTION A SOURCE SUMMARY

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

### A.1 General Information [326 IAC 2-7-4(c)][326 IAC 2-7-5(14)][326 IAC 2-7-1(22)]

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The Permittee owns and operates a stationary captive brass foundry.

Source Address:	775 Manchester Drive, Wabash, Indiana 46992
Mailing Address:	PO Box 398, 775 Manchester Ave., Wabash, Indiana 46992-0398
General Source Phone Number:	260-269-3578
SIC Code:	3366, 3362
County Location:	Wabash
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Operating Permit Program Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

### A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(14)]

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

#### **Charging, Melting, and Pouring/Cooling:**

- (a) Unit #23, consisting of:
- (1) Six (6) 5-ton each electric channel induction furnaces, two (2) constructed in 1970, one (1) constructed in 1973, two (2) constructed in 1975, one (1) constructed in 2004, each with a 1.25 tons per hour melt capacity;
  - (2) One (1) box induction furnace, constructed in 1996, with a 0.695 ton per hour melt capacity;
  - (3) One (1) crucible induction furnace, constructed in 1993, with a 0.53 ton per hour melt capacity; and
  - (4) Pouring/Casting operations associated with seven (7) molding lines, identified as #1 Handline, #1 Harrison, #2 Harrison, #1 Sinto, #2 Sinto, #3 Sinto, and #4 Sinto, constructed in 1971, 1970, 1988, 1997, 1998, 2000, and 2004, respectively.

Due to power supply limitations the box induction furnace and crucible induction furnace cannot operate simultaneously. The total maximum melt capacity is 8.195 tons per hour. Metallic fume emissions from melting and pouring, including transfer points, controlled by nine (9) baghouse modules, identified as "UU" with a common inlet but nine (9) individual stack discharges. [40 CFR 63, Subpart ZZZZZZ]

### **Shakeout, Sand Handling, Mold Making, and Core Making:**

- (b) Shakeout and Sand Handling from:
  - (1) Unit #6, including the #1 Handline and Harrison sand tanks plus the shakeout and conveyor operations for four (4) mold lines, identified as #1 Handline, #1 Harrison, #2 Harrison, and #4 Sinto, constructed in 1970 and modified in 2004, with a maximum combined throughput of 63 tons per hour, equipped with a baghouse which returns captured sand particulate back to the system, exhausting to Stack "H";
  - (2) Unit #20 sand system and shakeout, for three (3) mold lines, identified as #1 Sinto, #2 Sinto, and #3 Sinto, constructed in 1973 and modified in 1997, with a maximum combined throughput of 45 tons per hour, equipped with a baghouse which returns the captured sand particulate back to the system, exhausting to Stack "KK";
- (c) One (1) sand treatment and brass reclaim operations, identified as Unit #13, constructed in 1980, with a maximum throughput of 15 tons per hour, controlled by Baghouse "T"; and
- (d) Core room ventilation, identified as Unit #19, constructed in 1970 and revised in 1991, for a maximum facility melt throughput of 8.195 tons per hour, including ventilation of thirteen (13) natural gas-fired core making units with a total maximum heat input capacity of 2.464 million British Thermal Units per hour, and a sand throughput of 2.068 tons per hour.

### **Machining, Grinding, and Finishing:**

- (e) One (1) Iron Room for cast iron grinding, boring, and tapping operations, identified as Unit #5, constructed in 1973 and approved for modification in 2013, with a maximum throughput of 0.78 tons per hour, using portable fabric filters as control, exhausting inside the building;
- (f) One (1) Pangborn 12GN steel shot blast cleaner, identified as, Unit #11, constructed in 1978, with a maximum throughput of 2.73 tons per hour, using Baghouse "Q" for particulate emissions control;
- (g) One (1) Pangborn 6GN steel shot blast cleaner, identified as Unit #12, constructed in 1970, with a maximum throughput of 1.37 tons per hour, using Baghouse "S" for particulate emissions control;
- (h) One (1) continuous flow steel shot blast cleaner, identified as Unit #14, constructed in 1970, for removing sand and internal cores from castings, with a maximum casting throughput of 8.195 tons per hour, using Baghouse "U" for particulate emissions control;
- (i) One (1) foundry grinding and cut-off operations, identified as Unit #15, constructed in 1970, with a maximum throughput of 8.195 tons per hour, using Baghouse "V" for particulate emissions control;
- (j) Various machining, grinding, and polishing operations, identified as Unit #16, constructed in 1980, with a maximum throughput of 0.78 tons per hour, using Baghouse "W" for capturing brass chips to be recycled as well as for controlling dust emissions. The exhaust gas is vented through a drop box to reduce particulate loading and then to the baghouse;

- (k) Various machining, grinding, and polishing operations, identified as Unit #17, constructed in 1981, with a maximum throughput of 2.13 tons per hour, using Baghouse "X" for capturing brass chips to be recycled as well as for controlling dust emissions. The exhaust gas is vented through a drop box to reduce particulate loading and then to the baghouse;
- (l) Various machining, grinding, and polishing operations, identified as Unit #18, constructed in 1980, with a maximum throughput of 0.90 tons per hour, using Baghouse "Y" for capturing steel particulate;
- (m) Various machining, grinding, and polishing operations, identified as Unit #26, constructed in 1999 and approved for modification in 2013, with a maximum throughput of 2.238 tons per hour, using Baghouse "BC" for capturing brass chips to be recycled as well as for controlling dust emissions. The exhaust gas is vented through a drop box to reduce particulate loading and then to the baghouse;
- (n) One (1) shot blast machine, constructed in 2009, identified as Unit #29, with a maximum capacity of 2.0 tons per hour of no-lead brass castings, and using a cartridge filter for particulate control (Note: this unit is used as an alternative to Unit #14 when no-lead brass is being processed. The combined maximum capacity of both units is 8.195 tons per hour); and
- (o) One (1) cut-off saw, approved for constructed in 2009, identified as Unit #30, with a maximum capacity of 2.0 tons per hour of no-lead brass castings, and using a cartridge filter for particulate control (Note: this unit is used as an alternative to Unit #15 when no-lead brass is being processed. The combined maximum capacity of both units is 8.195 tons per hour).

**Combustion Units:**

- (p) One (1) 100 KW spark ignition internal combustion natural gas-fired emergency generator, constructed in 2007, used to generate electric power, with a maximum power output rate of 134.1 horsepower, firing natural gas only, using no control and exhausting to the atmosphere; [40 CFR 63, Subpart ZZZZ] and
- (q) Two (2) diesel fuel-fired 423 maximum horsepower (2.9 million British thermal Units per hour) emergency generators, installed in 1992. [40 CFR 63, Subpart ZZZZ]

**Surface Coating Operations:**

- (r) One (1) Binks Teflon spray coating booth, identified as Unit #21, installed in 1980, with a maximum rate of 121.7 units per hour, using a semi-automatic air atomization application method for coating brass balls, using paper air filters for overspray control, and exhausting to Stack "OO";
- (s) One (1) nut coating operation for coating fittings, identified as Unit #27, installed in 1996, with a maximum coating rate of 1,960 units per hour, utilizing a spin coating application system; and
- (t) One (1) paint booth for miscellaneous painting and gluing activities, using brush, roller, or aerosol spray applications, with a maximum capacity of 3.75 pounds of coating per hour, using dry filters for particulate control, constructed in 2008.

**Reclamation Unit:**

- (u) One (1) Didion rotary metal reclaimer, approved for construction in 2013, with a maximum throughput of 2.00 tons of metal per hour, using Baghouse "G" for particulate emissions control, exhausting to Stack "G."

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

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

- (a) One (1) tool grinding operation, identified as Unit #8, vented through Baghouse "C";
- (b) Machining operations vented through Baghouse "AB";
- (c) Three (3) natural gas-fired chip dryers, each with a maximum heat input of 0.625 million British Thermal Units per hour, each with a maximum throughput of 50 pounds of volatiles per hour, and each equipped (as integral part of the equipment as determined in F169-5469-00003, issued on December 13, 1996) with a 0.425 million British Thermal Units per hour thermal oxidizer, exhausting to Stack "TT", Stack "VV" and Stack "32", respectively;
- (d) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million British Thermal Units per hour, including, but not limited to:  
  
Two (2) natural gas fired boilers for building heating, identified as Units #1 and #2, installed in 2009, each with a maximum heat input capacity of 7.325 MMBtu/hr, and exhausting to Stack "A"; [326 IAC 6-2-4]
- (e) Propane or liquefied petroleum gas, or butane-fired combustion sources with heat input equal to or less than six (6) million British Thermal Units per hour;
- (f) Combustion source flame safety purging on startup;
- (g) A petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month;
- (h) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughput less than 12,000 gallons;
- (i) Vessels storing lubricating oils, hydraulic oils, machining oils, and coolant fluids;
- (j) Refractory storage not requiring air pollution control equipment;
- (k) Application of oils, greases, lubricants or other nonvolatile materials applied as temporary protective coatings;
- (l) Machining where an aqueous cutting coolant continuously floods the machining interface;
- (m) Degreasing operations, consisting of cold cleaner degreasers with remote reservoirs that were existing as of January 1, 1980, that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6;
- (n) Cleaners and solvents with low vapor pressure and with a combined usage of less than 145 gallons per 12 months;

- (o) Brazing equipment, cutting torch, soldering equipment and welding equipment not resulting in HAP emissions;
- (p) Closed loop heating and cooling systems;
- (q) Cutting 200.00 linear feet or less of one inch (1") plate or equivalent;
- (r) Using 80 tons or less of welding consumables;
- (s) Operations using aqueous solutions with less than 1 percent of VOCs excluding HAPs;
- (t) Water-based adhesives that are less than or equal to 5 percent VOCs by volume excluding HAPs;
- (u) Quenching operations used with heat treating processes;
- (v) Replacement or repair of electrostatic precipitators, bags in baghouse and filters in other air filtration equipment;
- (w) Heat exchanger cleaning and repair;
- (x) Paved and unpaved roads and parking lots with public access; [326 IAC 6-4]
- (y) Purging of gas lines and vessels not associated with production process;
- (z) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup;
- (aa) Blowdown for any of the following: sight glass, boiler, compressors, pumps, and cooling tower;
- (bb) One (1) 100 HP four-stroke rich burn diesel-fired emergency fire pump, installed in January of 1980, using no control and exhausting to the atmosphere. [40 CFR 63, Subpart ZZZZ];
- (cc) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4,000 actual standard cubic feet per minute, including the following: deburring, buffing, polishing, abrasive blasting, pneumatic conveying, and woodworking operations.
- (dd) Mold release agent using low volatile products;
- (ee) A laboratory as defined in 326 IAC 2-7-1(20)(C);
- (ff) Other activities with volatile organic compound (VOC) emissions equal to or less than 15 pounds per day, and activities with particulate matter (PM) emissions equal to or less than 25 pounds per day;
- (gg) One (1) parts washer with no VOC emissions exhausting through stack/vent "BD"; and
- (hh) One (1) powder coating booth, used for epoxy coating, with a maximum capacity of eighteen (18) units per hour, using an integral cartridge filter for particulate capture and reuse, constructed in 1993 [326 IAC 6-3-2].

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

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

- (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]

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Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, 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)]

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- (a) This permit, T169-25077-00003, 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]

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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] [IC 13-17-12]

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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)]

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

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

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

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

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- (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, or its equivalent, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.
- (c) A "responsible official" is defined at 326 IAC 2-7-1(34).

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

- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. 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 and Enforcement Branch, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

and

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

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

The submittal by the Permittee does require 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]

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

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

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

The PMP extension notification does not require 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]

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

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

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

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

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

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

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

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

The notification which shall be submitted by the Permittee does not require 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. Any emergencies that have been previously reported pursuant to paragraph (b)(5) of this condition and certified by a "responsible official" need only referenced by the date of the original 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]**

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- (a) All terms and conditions of permits established prior to T169-25077-00003 and issued pursuant to permitting programs approved into the state implementation plan have been either:
  - (1) incorporated as originally stated,
  - (2) revised under 326 IAC 2-7-10.5, or
  - (3) deleted under 326 IAC 2-7-10.5.
- (b) Provided that all terms and conditions are accurately reflected in this combined permit, all previous registrations and permits are superseded by this combined new source review and part 70 operating permit.

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

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

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

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- (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 and Enforcement Branch, 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]

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- (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)]

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

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

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

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

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

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

Any such application 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)]**

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

- (b) Notwithstanding 326 IAC 2-7-12(b)(1) 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]**

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

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

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

and

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

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

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

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

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

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

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require 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]**

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

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

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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]**

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

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

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

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

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

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

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

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

## SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

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

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

C.2 Opacity [326 IAC 5-1]

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

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

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

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

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

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

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

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

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

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

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

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of

326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

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

All required notifications shall be submitted to:

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

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification 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 Licensed Asbestos Inspector**  
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Licensed Asbestos inspector is not federally enforceable.

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

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

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- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing 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 and Enforcement Branch, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require 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]

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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)]

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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 or ninety (90) days of initial start-up, whichever is later. 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 and Enforcement Branch, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

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

The notification which shall be submitted by the Permittee does require 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]**

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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)]**

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- (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]**

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

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

Indiana Department of Environmental Management  
Compliance and Enforcement 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) In accordance with the compliance schedule specified in 326 IAC 2-6-3(b)(1), starting in 2004 and every three (3) years thereafter, the Permittee shall submit by July 1 an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:
  - (1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);
  - (2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1(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]**

- (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 or ninety (90) days of initial start-up, whichever is later.

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

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- (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 and Enforcement Branch, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (d) 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 or the date of initial start-up, whichever is later, 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.

**Stratospheric Ozone Protection**

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

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

- (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.

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

## SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

### Emissions Unit Description:

#### Charging, Melting, and Pouring/Cooling:

- (a) Unit #23, consisting of:
- (1) Six (6) 5-ton each electric channel induction furnaces, two (2) constructed in 1970, one (1) constructed in 1973, two (2) constructed in 1975, one (1) constructed in 2004, each with a 1.25 tons per hour melt capacity;
  - (2) One (1) box induction furnace, constructed in 1996, with a 0.695 ton per hour melt capacity;
  - (3) One (1) crucible induction furnace, constructed in 1993, with a 0.53 ton per hour melt capacity; and
  - (4) Pouring/Casting operations associated with seven (7) molding lines, identified as #1 Handline, #1 Harrison, #2 Harrison, #1 Sinto, #2 Sinto, #3 Sinto, and #4 Sinto, constructed in 1971, 1970, 1988, 1997, 1998, 2000, and 2004, respectively.

Due to power supply limitations the box induction furnace and crucible induction furnace cannot operate simultaneously. The total maximum melt capacity is 8.195 tons per hour. Metallic fume emissions from melting and pouring, including transfer points, controlled by nine (9) baghouse modules, identified as "UU" with a common inlet but nine (9) individual stack discharges. [40 CFR 63, Subpart ZZZZZZ]

#### Shakeout, Sand Handling, Mold Making, and Core Making:

- (b) Shakeout and Sand Handling from:
- (1) Unit #6, including the #1 Handline and Harrison sand tanks plus the shakeout and conveyor operations for four (4) mold lines, identified as #1 Handline, #1 Harrison, #2 Harrison, and #4 Sinto, constructed in 1970 and modified in 2004, with a maximum combined throughput of 63 tons per hour, equipped with a baghouse which returns captured sand particulate back to the system, exhausting to Stack "H";
  - (2) Unit #20 sand system and shakeout, for three (3) mold lines, identified as #1 Sinto, #2 Sinto, and #3 Sinto, constructed in 1973 and modified in 1997, with a maximum combined throughput of 45 tons per hour, equipped with a baghouse which returns the captured sand particulate back to the system, exhausting to Stack "KK";
- (c) One (1) sand treatment and brass reclaim operations, identified as Unit #13, constructed in 1980, with a maximum throughput of 15 tons per hour, controlled by Baghouse "T"; and
- (d) Core room ventilation, identified as Unit #19, constructed in 1970 and revised in 1991, for a maximum facility melt throughput of 8.195 tons per hour, including ventilation of thirteen (13) natural gas-fired core making units with a total maximum heat input capacity of 2.464 million British Thermal Units per hour, and a sand throughput of 2.068 tons per hour.

**Machining, Grinding, and Finishing:**

- (e) One (1) Iron Room for cast iron grinding, boring, and tapping operations, identified as Unit #5, constructed in 1973 and approved for modification in 2013, with a maximum throughput of 0.78 tons per hour, using portable fabric filters as control, exhausting inside the building;
- (f) One (1) Pangborn 12GN steel shot blast cleaner, identified as, Unit #11, constructed in 1978, with a maximum throughput of 2.73 tons per hour, using Baghouse "Q" for particulate emissions control;
- (g) One (1) Pangborn 6GN steel shot blast cleaner, identified as Unit #12, constructed in 1970, with a maximum throughput of 1.37 tons per hour, using Baghouse "S" for particulate emissions control;
- (h) One (1) continuous flow steel shot blast cleaner, identified as Unit #14, constructed in 1970, for removing sand and internal cores from castings, with a maximum casting throughput of 8.195 tons per hour, using Baghouse "U" for particulate emissions control;
- (i) One (1) foundry grinding and cut-off operations, identified as Unit #15, constructed in 1970, with a maximum throughput of 8.195 tons per hour, using Baghouse "V" for particulate emissions control;
- (j) Various machining, grinding, and polishing operations, identified as Unit #16, constructed in 1980, with a maximum throughput of 0.78 tons per hour, using Baghouse "W" for capturing brass chips to be recycled as well as for controlling dust emissions. The exhaust gas is vented through a drop box to reduce particulate loading and then to the baghouse;
- (k) Various machining, grinding, and polishing operations, identified as Unit #17, constructed in 1981, with a maximum throughput of 2.13 tons per hour, using Baghouse "X" for capturing brass chips to be recycled as well as for controlling dust emissions. The exhaust gas is vented through a drop box to reduce particulate loading and then to the baghouse;
- (l) Various machining, grinding, and polishing operations, identified as Unit #18, constructed in 1980, with a maximum throughput of 0.90 tons per hour, using Baghouse "Y" for capturing steel particulate;
- (m) Various machining, grinding, and polishing operations, identified as Unit #26, constructed in 1999 and approved for modification in 2013, with a maximum throughput of 2.238 tons per hour, using Baghouse "BC" for capturing brass chips to be recycled as well as for controlling dust emissions. The exhaust gas is vented through a drop box to reduce particulate loading and then to the baghouse;
- (n) One (1) shot blast machine, constructed in 2009, identified as Unit #29, with a maximum capacity of 2.0 tons per hour of no-lead brass castings, and using a cartridge filter for particulate control (Note: this unit is used as an alternative to Unit #14 when no-lead brass is being processed. The combined maximum capacity of both units is 8.195 tons per hour); and

- (o) One (1) cut-off saw, approved for constructed in 2009, identified as Unit #30, with a maximum capacity of 2.0 tons per hour of no-lead brass castings, and using a cartridge filter for particulate control (Note: this unit is used as an alternative to Unit #15 when no-lead brass is being processed. The combined maximum capacity of both units is 8.195 tons per hour).

**Reclamation Unit:**

- (u) One (1) Didion rotary metal reclaimer, approved for construction in 2013, with a maximum throughput of 2.00 tons of metal per hour, using Baghouse "G" for particulate emissions control, exhausting to Stack "G."

(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 Secondary Metal Production [326 IAC 2-2]**

Each of the furnaces, identified as part of Unit #23, shall melt only clean charge, customer returns, or internal scrap. Violation of this condition would cause the source to be considered a secondary metal production facility for purposes of 326 IAC 2-2, Prevention of Significant Deterioration.

Compliance with the above condition, combined with Condition D.1.2 shall render 326 IAC 2-2 (PSD) not applicable.

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

In order to make the requirements of 326 IAC 2-2 (PSD) not applicable, the PM, PM<sub>10</sub> and PM<sub>2.5</sub> emissions from the Didion Rotary Metal Reclaimer, Units #6, #11 through #18, #20, #23, #26, #29, and #30 shall not exceed the emissions limits listed in the table below:

Emission Unit	PM Emission Limit (lb/hr)	PM <sub>10</sub> Emission Limit (lb/hr)	PM <sub>2.5</sub> Emission Limit (lb/hr)
Unit #23: Furnace Charging, Melting and Pouring	5.71	5.71	5.71
Unit #6: #1 Handline and Harrison Sand Tanks and Shakeout and Conveyor Operations for #1 Handline, #1 Harrison, #2 Harrison, #4 Sinto Mold Lines	3.42	3.42	3.42
Unit #20: Shakeout and Sand Handling for #1, #2, #3 Sintos	3.42	3.42	3.42
Unit #13: Sand Treatment and Brass Reclaim Operations	2.28	2.28	2.28
Didion Rotary Metal Reclaimer	1.14	1.14	1.14
Unit #11: Shot Blasting	1.14	1.14	1.14
Unit #12: Shot Blasting	0.46	0.46	0.46
Unit #14: Shot Blasting	3.42	3.42	3.42
Unit #15: Grinding and Cut-Off	3.42	3.42	3.42
Unit #16: Machining, Grinding, and Polishing	0.68	0.68	0.68

Emission Unit	PM Emission Limit (lb/hr)	PM <sub>10</sub> Emission Limit (lb/hr)	PM <sub>2.5</sub> Emission Limit (lb/hr)
Unit #17: Machining, Grinding, and Polishing	2.28	2.28	2.28
Unit #18: Machining, Grinding, and Polishing	0.68	0.68	0.68
Unit #26: Machining, Grinding, and Polishing	2.28	2.28	2.28
Unit #29: Shot blast machine	1.14	1.14	1.14
Unit #30: Cut-off saw	1.14	1.14	1.14

Compliance with the above limits, combined with Condition D.1.1 and the potential to emit PM, PM<sub>10</sub> and PM<sub>2.5</sub> from other emission units at the source, shall limit the emissions of PM, PM<sub>10</sub> and PM<sub>2.5</sub> from the entire source to less than 250 tons per twelve (12) consecutive month period each and render 326 IAC 2-2 not applicable.

**D.1.3 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 Didion Rotary Metal Reclaimer, Units #5, #6, #11 through #20, #23, #26, #29, and #30 shall not exceed the pounds per hour emission limitations when operating at maximum process weight rates as specified in the table below:

Emission Unit	Process Weight Rate (ton/hr)	326 IAC 6-3-2 Allowable Particulate Emission Limit (lb/hr)
Unit #23: Furnace Charging, Melting and Pouring	8.195	16.78
Unit #6: #1 Handline and Harrison Sand Tanks and Shakeout and Conveyor Operations for #1 Handline, #1 Harrison, #2 Harrison, #4 Sinto Mold Lines	67.10	47.36
Unit #20: Shakeout and Sand Handling for #1, #2, #3 Sintos	49.10	44.41
Unit #13: Sand Treatment and Brass Reclaim Operations	15.00	25.16
Unit #19: Core room Ventilation	10.263	19.51
Didion Rotary Metal Reclaimer	2.00	6.52
Unit #5: Iron Room	0.78	3.47
Unit #11: Shot Blasting	2.73	8.04

Emission Unit	Process Weight Rate (ton/hr)	326 IAC 6-3-2 Allowable Particulate Emission Limit (lb/hr)
Unit #12: Shot Blasting	1.37	5.05
Unit #14: Shot Blasting	8.195	16.78
Unit #15: Grinding and Cut-Off	8.195	16.78
Unit #16: Machining, Grinding, and Polishing	0.78	3.47
Unit #17: Machining, Grinding, and Polishing	2.13	6.80
Unit #18: Machining, Grinding, and Polishing	0.90	3.82
Unit #26: Machining, Grinding, and Polishing	2.238	7.03
Unit #29: Shot blast machine	2.00	6.52
Unit #30: Cut-off saw	2.00	6.52

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

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

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

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

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

D.1.4 Hazardous Air Pollutants (Lead) [326 IAC 2-4.1][326 IAC 2-2]

In order to render the requirements of 326 IAC 2-4.1 and 326 IAC 2-2 not applicable, the lead emissions from the Didion Rotary Metal Reclaimer, Units #6, #11 through #18, #20, #23, #26, #29, and #30 shall not exceed the emissions limits listed in the table below:

Emission Unit	Lead Emission Limit (lb/hr)
Unit #23: Furnace Charging, Melting and Pouring	0.548
Unit #6: #1 Handline and Harrison Sand Tanks and Shakeout and Conveyor Operations for #1 Handline, #1 Harrison, #2 Harrison, #4 Sinto Mold Lines	0.034
Unit #20: Shakeout and Sand Handling for #1, #2, #3 Sintos	0.034
Unit #13: Sand Treatment and Brass Reclaim Operations	0.009
Didion Rotary Metal Reclaimer	0.012
Unit #11: Shot Blasting	0.119
Unit #12: Shot Blasting	0.059
Unit #14: Shot Blasting	0.018
Unit #15: Grinding and Cut-Off	0.342
Unit #16: Machining, Grinding, and Polishing	0.056
Unit #17: Machining, Grinding, and Polishing	0.306
Unit #18: Machining, Grinding, and Polishing	0.064
Unit #26: Machining, Grinding, and Polishing	0.306
Unit #29: Shot blast machine	0.023
Unit #30: Cut-off saw	0.023

Compliance with the above limits, combined with the potential to emit HAP from other emission units at this source, shall limit the lead from the entire source to less than ten (10) tons per twelve (12) consecutive month period and the total HAPs from the entire source to less than twenty-five (25) tons per twelve (12) consecutive month period and render 326 IAC 2-4.1 (Major Source of Hazardous Air Pollutants) not applicable. Compliance with the above limits shall also render the requirements of 326 IAC 2-2 (PSD) not applicable.

**D.1.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]**

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

**Compliance Determination Requirements**

**D.1.6 Particulate Control**

- (a) In order to comply with Conditions D.1.2, D.1.3, and D.1.4, the baghouses and cartridge filters for particulate control shall be in operation and controlling emissions from the Didion Rotary Metal Reclaimer, Units #5, #6, #11 through #18, #20, #23, #26, #29, and #30 at all times these units 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.1.7 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]**

In order to demonstrate the compliance status with Conditions D.1.2, D.1.3, and D.1.4, the Permittee shall:

- (a) perform PM, PM<sub>10</sub>, PM<sub>2.5</sub> and lead testing on the stack of Baghouse UU controlling emissions from Unit #23, utilizing methods approved by the Commissioner. These tests shall be repeated at least once every five years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition. PM<sub>10</sub> and PM<sub>2.5</sub> contain filterable and condensable PM.
- (b) perform PM, PM<sub>10</sub>, PM<sub>2.5</sub> and lead testing on the stack of Baghouse H controlling emissions from Unit #6, utilizing methods approved by the Commissioner. These tests shall be repeated at least once every five years from the date of the most recent valid compliance demonstration on one (1) emission unit from Group A, as specified in the table below. Testing on any individual emission unit shall not be repeated until each emission unit in Group A has been tested. PM<sub>10</sub> and PM<sub>2.5</sub> contain filterable and condensable PM.

Group A Emission Units	
Emission Unit	Baghouse
Unit #6: #1 Handline and Harrison Sand Tanks and Shakeout and Conveyor Operations for #1 Handline, #1 Harrison, #2 Harrison, #4 Sinto Mold Lines	H
Unit #20: Shakeout and Sand Handling for #1, #2, #3 Sintos	KK
Unit #13: Sand Treatment and Brass Reclaim Operations	T

- (c) perform PM, PM<sub>10</sub>, PM<sub>2.5</sub> and lead testing on the stack of Baghouse G controlling emissions from Didion Rotary Metal Reclaimer, within sixty (60) days of reaching maximum capacity but no later than one hundred and eighty (180) days after initial startup, utilizing methods approved by the Commissioner. These tests shall be repeated at least once every five years from the date of the most recent valid compliance demonstration on one (1) emission unit from Group B, as specified in the table below. Testing on any individual emission unit shall not be repeated until each emission unit in Group B has been tested. PM<sub>10</sub> and PM<sub>2.5</sub> contain filterable and condensable PM.

Group B Emission Units	
Emission Unit	Baghouse
Unit #15: Grinding and Cut-Off	V
Didion Rotary Metal Reclaimer	G
Unit #16: Machining, Grinding, and Polishing	W
Unit #17: Machining, Grinding, and Polishing	X
Unit #18: Machining, Grinding, and Polishing	Y
Unit #26: Machining, Grinding, and Polishing	BC
Unit #30: Cut-off saw	Unit #30 cartridge filter

- (d) perform PM, PM<sub>10</sub>, PM<sub>2.5</sub> and lead testing on the stack of Baghouse U controlling emissions from Unit #14, utilizing methods approved by the Commissioner. These tests shall be repeated at least once every five years from the date of the most recent valid compliance demonstration on one (1) emission unit from Group C, as specified in the table below. Testing on any individual emission unit shall not be repeated until each emission unit in Group C has been tested. PM<sub>10</sub> and PM<sub>2.5</sub> contain filterable and condensable PM.

Group C Emission Units	
Emission Unit	Baghouse
Unit #14: Shot Blasting	U
Unit #11: Shot Blasting	Q
Unit #12: Shot Blasting	S
Unit #29: Shot blast machine	Unit #29 cartridge filter

- (e) All testing shall be conducted in accordance with Section C - Performance Testing.

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

### D.1.8 Baghouse Compliance Monitoring

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- (a) Except for Baghouse UU, for baghouses and cartridge filters equipped with a continuous broken bag (leak) detector at the exhaust stack, the Permittee shall comply with either Condition D.1.9 or Conditions D.1.10 and D.1.11.
- (b) For baghouses and cartridge filters that are not equipped with a continuous broken bag (leak) detector at the exhaust stack, the Permittee shall comply with Conditions D.1.10 and D.1.11.
- (c) For baghouse UU, the Permittee shall either comply with Condition D.1.13 or Conditions D.1.10 and D.1.11.
- (d) All baghouses and cartridge filters shall comply with Condition D.1.12.

### D.1.9 Broken Bag Detectors

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- (a) Except for Baghouse UU, for baghouses and cartridge filters equipped with a continuous broken bag (leak) detector at the exhaust stack, the detector shall be used for detecting the potential control device malfunction.
- (b) Each broken bag detection system must be installed, calibrated, operated, and maintained according to the "Fabric Filter Bag Leak Detection Guidance," (September 1997).
- (c) In the event that a breakdown of a broken bag detector occurs, a record shall be made of the times and the reasons of the breakdown and efforts made to correct the problem.
- (d) Whenever a broken bag detector is malfunctioning or is down for maintenance or repairs for a period of twenty-four (24) hours or more, and a backup broken bag detector is not online within twenty-four (24) hours of shutdown or malfunction of the primary broken bag detector, the Permittee shall comply with Conditions D.1.10 and D.1.11 until such time that a broken bag detector is online and functioning, pursuant to paragraph (b) of this condition.
- (e) The detector shall be subject to approval by IDEM, OAQ.

### D.1.10 Visible Emissions Notations

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For baghouses or cartridge filters that are not equipped with a continuous broken bag (leak) detector or as an alternative to complying with Condition D.1.9, the Permittee shall comply with the following:

- (a) Daily visible emission notations of stack exhaust from each baghouse and cartridge filter shall be performed during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps. Failure to take response steps shall be considered a deviation from this permit. Section C – Response to Excursions or Exceedances contains the Permittee’s obligation with regard to the reasonable response steps required by this condition.

**D.1.11 Parametric Monitoring**

For baghouses and cartridge filters that are not equipped with a continuous broken bag (leak) detector or as an alternative to complying with Condition D.1.9, the Permittee shall record the pressure drop across each baghouse at least once per day when each emissions unit is in operation. When for any one reading, the pressure drop is outside the normal range, the Permittee shall take a reasonable response. The normal pressure is listed in the table below, unless a different upper-bound or lower-bound value for this range is determined during the latest valid compliant stack test. Section C - Response to Excursions and Exceedances contains the Permittee’s obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response shall be considered a deviation from this permit.

Emission Unit	Baghouse	Pressure Drop Range (inches of water)
Unit #23: Furnace Charging, Melting and Pouring	UU	3.0 to 8.0
Unit #6: #1 Handline and Harrison Sand Tanks and Shakeout and Conveyor Operations for #1 Handline, #1 Harrison, #2 Harrison, #4 Sinto Mold Lines	H	1.5 to 5.5
Unit #20: Shakeout and Sand Handling for #1, #2, #3 Sintos	KK	1.5 to 5.5
Unit #13: Sand Treatment and Brass Reclaim Operations	T	1.5 to 5.5
Didion Rotary Metal Reclaimer	G	1.5 to 5.5
Unit #11: Shot Blasting	Q	1.5 to 5.5
Unit #12: Shot Blasting	S	1.5 to 5.5
Unit #14: Shot Blasting	U	1.5 to 5.5
Unit #15: Grinding and Cut-Off	V	1.5 to 5.5
Unit #16: Machining, Grinding, and Polishing	W	1.0 to 5.0
Unit #17: Machining, Grinding, and Polishing	X	1.0 to 5.0
Unit #18: Machining, Grinding, and Polishing	Y	1.0 to 5.0
Unit #26: Machining, Grinding, and Polishing	BC	1.0 to 5.0
Unit #29: Shot blast machine	Unit #29 cartridge filter	1.0 to 8.0
Unit #30: Cut-off saw	Unit #30 cartridge filter	1.0 to 8.0

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.1.12 Broken or Failed Bag Detection

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

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, by an alarm of the bag leak detector warning system, or by other means such as gas temperature, flow rate, air infiltration, leaks, or dust traces. An alarm of the bag leak detector warning system shall not be considered an indicator of bag failure if the baghouse's pressure drop and visible emissions readings are normal.

#### D.1.13 Bag Leak Detection

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If the Permittee chooses, the Permittee shall install and operate a bag leak detection system for each baghouse module in baghouse UU, controlling Unit #23, with the following requirements:

- (a) Each bag leak detection system must be installed, calibrated, operated, and maintained according to the "Fabric Filter Bag Leak Detection Guidance," (September 1997).
- (b) The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 1 milligram per actual cubic meter (0.00044 grains per actual cubic foot) or less.
- (c) The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.
- (d) The bag leak detection system must be equipped with an alarm system that will sound when the system detects an increase in relative particulate loading over the alarm set point established according to paragraph (e) below. The alarm must be located such that it can be heard by the appropriate plant personnel.
- (e) In the initial adjustment of the bag leak detection system, at a minimum, the baseline output must be established by adjusting the sensitivity (range) and the averaging period of the device, the alarm set points, and the alarm delay time.
  - (1) Following the initial adjustment of the system, the averaging period, alarm set point, or alarm delay time must not be adjusted without IDEM approval, except as provided by subparagraph (2) below.

- (2) Once per quarter, the Permittee may adjust the sensitivity of the bag leak detection system to account for seasonal effects, including temperature and humidity, according to procedures identified in the site-specific monitoring plan.
- (f) The bag leak detection sensor must be installed downstream of the fabric filter.
- (g) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.

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

#### **D.1.14 Record Keeping Requirement**

---

- (a) In order to document the compliance status with Condition D.1.1, the Permittee shall maintain records of the type and amount of metal melted in the furnaces sufficient to show compliance with Condition D.1.1.
- (b) When using Visible Emissions Notations and Parametric Monitoring for baghouse and cartridge filter compliance monitoring,
  - (1) The Permittee shall maintain daily records of the visible emission notations of the baghouse and cartridge filter stack exhaust in order to document compliance with Condition D.1.10. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of a visible emission notation, (i.e. the process did not operate that day).
  - (2) The Permittee shall maintain daily records of pressure drop across the baghouse and cartridge filters in order to document compliance with Condition D.1.11. 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, (i.e. the process did not operate that day).
- (c) When using Broken Bag Detectors for baghouse and cartridge filter compliance monitoring, for baghouses other than Baghouse UU, in order to document compliance with Condition D.1.9, the Permittee shall maintain the following daily records:
  - (1) The date and time of all broken bag detector alarms;
  - (2) For each valid alarm, the time the Permittee initiated corrective action;
  - (3) The corrective action taken; and
  - (4) The date on which the corrective action was completed.
- (d) If the Permittee chooses to comply with Condition D.1.13, the Permittee shall keep the following records for Baghouse UU to document compliance with Condition D.1.13:
  - (1) Records of the bag leak detection system output.
  - (2) Records of bag leak detection system adjustments, including the date and time of the adjustment, the initial bag leak detection system settings, and the final bag leak detection system settings.

- (3) The date and time of all bag leak detection system alarms, and for each valid alarm, the time the Permittee initiated corrective action, the corrective action taken, and the date on which the corrective action was completed.
- (e) Section C – General Record Keeping Requirements contains the Permittee's obligation with regard to the record keeping required by this condition.

## SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

### Emissions Unit Description:

#### Insignificant Activities:

- (d) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million British Thermal Units per hour, including, but not limited to:

Two (2) natural gas fired boilers for building heating, identified as Units #1 and #2, installed in 2009, each with a maximum heat input capacity of 7.325 MMBtu/hr, and exhausting to Stack "A"; [326 IAC 6-2-4]

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

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

#### D.2.1 Particulate Emissions [326 IAC 6-2-4]

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Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating), particulate emissions from the boilers, identified as Units #1 and #2, shall be limited to 0.41 pounds per MMBtu heat input, each.

## SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

### Emissions Unit Description:

#### Surface Coating Operations:

- (r) One (1) Binks Teflon spray coating booth, identified as Unit #21, installed in 1980, with a maximum rate of 121.7 units per hour, using a semi-automatic air atomization application method for coating brass balls, using paper air filters for overspray control, and exhausting to Stack "OO";

#### Insignificant Activities

- (hh) One (1) powder coating booth, used for epoxy coating, with a maximum capacity of eighteen (18) units per hour, using an integral cartridge filter for particulate capture and reuse, constructed in 1993 [326 IAC 6-3-2].

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

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

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

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- (a) Pursuant to 326 IAC 6-3-2(d), particulate from Binks Teflon Spray Coating Booth (Unit #21) shall be controlled by a dry particulate filter, waterwash, or an equivalent control device, and the Permittee shall operate the control device in accordance with the manufacturer's specifications.
- (b) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the powder coating booth shall not exceed 0.551 pounds per hour.

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

---

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

### Compliance Determination Requirements

#### D.3.3 Particulate Control

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In order to demonstrate the compliance status with Conditions D.3.1(b), the filter for particulate control shall be in operation and control emissions from the powder coating booth at all times the powder coating booth is in operation.

## SECTION E.1 FACILITY OPERATION CONDITIONS

### Emissions Unit Description:

#### Charging, Melting, and Pouring/Cooling:

- (a) Unit #23, consisting of:
- (1) Six (6) 5-ton each electric channel induction furnaces, two (2) constructed in 1970, one (1) constructed in 1973, two (2) constructed in 1975, one (1) constructed in 2004, each with a 1.25 tons per hour melt capacity;
  - (2) One (1) box induction furnace, constructed in 1996, with a 0.695 ton per hour melt capacity;
  - (3) One (1) crucible induction furnace, constructed in 1993, with a 0.53 ton per hour melt capacity; and
  - (4) Pouring/Casting operations associated with seven (7) molding lines, identified as #1 Handline, #1 Harrison, #2 Harrison, #1 Sinto, #2 Sinto, #3 Sinto, and #4 Sinto, constructed in 1971, 1970, 1988, 1997, 1998, 2000, and 2004, respectively.

Due to power supply limitations the box induction furnace and crucible induction furnace cannot operate simultaneously. The total maximum melt capacity is 8.195 tons per hour. Metallic fume emissions from melting and pouring, including transfer points, controlled by nine (9) baghouse modules, identified as "UU" with a common inlet but nine (9) individual stack discharges. [40 CFR 63, Subpart ZZZZZZ]

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

#### E.1.1 General Provisions Relating to NESHAP ZZZZZZ [326 IAC 20-1][40 CFR 63, Subpart A]

Pursuant to 40 CFR 63.11555, 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, as specified in Table 1 of 40 CFR Part 63, Subpart ZZZZZZ in accordance with schedule in 40 CFR 63 Subpart ZZZZZZ.

#### E.1.2 Area Source Standards for Aluminum, Copper, and Other Nonferrous Foundries NESHAP [40 CFR 63, Subpart ZZZZZZ]

The Permittee which engages in a copper foundry operation shall comply with the following provisions of 40 CFR Part 63, Subpart ZZZZZZ (included as Attachment A of this permit), with a compliance date of June 27, 2011:

- (1) 40 CFR 63.11544(a)(2), (a)(4)(i), (b), (c);
- (2) 40 CFR 63.11545(a);
- (3) 40 CFR 63.11550(a), (b)(1), (d);
- (4) 40 CFR 63.11551;
- (5) 40 CFR 63.11552;
- (6) 40 CFR 63.11553;
- (7) 40 CFR 63.11555;
- (8) 40 CFR 63.11556;
- (9) 40 CFR 63.11557; and
- (10) Table 1 to 40 CFR 63, Subpart ZZZZZZ.

## SECTION E.2 FACILITY OPERATING CONDITIONS

### Emissions Unit Description:

- (p) One (1) 100 KW spark ignition internal combustion natural gas-fired emergency generator, constructed in 2007, used to generate electric power, with a maximum power output rate of 134.1 horsepower, firing natural gas only, using no control and exhausting to the atmosphere. [40 CFR 63, Subpart ZZZZ]
- (q) Two (2) diesel fuel-fired 423 maximum horsepower (2.9 million British thermal Units per hour) emergency generators, installed in 1992. [40 CFR 63, Subpart ZZZZ]

### Insignificant Activity

- (bb) One (1) 100 HP four-stroke rich burn diesel-fired emergency fire pump, installed in January of 1980, using no control and exhausting to the atmosphere. [40 CFR 63, Subpart ZZZZ]

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

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

### E.2.1 General Provisions Relating to NESHAP ZZZZ [326 IAC 20-1][40 CFR 63, Subpart A]

Pursuant to 40 CFR 63.6665, 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, as specified in Table 8 of 40 CFR Part 63, Subpart ZZZZ in accordance with schedule in 40 CFR 63 Subpart ZZZZ.

### E.2.2 National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines [40 CFR 63, Subpart ZZZZ][326 IAC 20-82]

The Permittee shall comply with the following provisions of 40 CFR 63, Subpart ZZZZ, which are incorporated by reference as 326 IAC 20-82 (included as Attachment B of this permit) as specified below:

- (a) For the 100 HP diesel-fired emergency fire pump and both 423 HP diesel-fired emergency generators, the Permittee shall comply with the following:
  - (1) 40 CFR 63.6580;
  - (2) 40 CFR 63.6585
  - (3) 40 CFR 63.6590(a)(1)(iii);
  - (4) 40 CFR 63.6595(a)(1) (b), (c);
  - (5) 40 CFR 63.6603(a);
  - (6) 40 CFR 63.6605;
  - (7) 40 CFR 63.6625(e)(3), (f), (h), (i), (j);
  - (8) 40 CFR 63.6635;
  - (9) 40 CFR 63.6640(a), (b), (e), (f)(1), (f)(2), (f)(4);
  - (10) 40 CFR 63.6655(d), (e)(2), (e)(3);
  - (11) 40 CFR 63.6650;
  - (12) 40 CFR 63.6655;
  - (13) 40 CFR 63.6660;
  - (14) 40 CFR 63.6665;
  - (15) 40 CFR 63.6670;
  - (16) 40 CFR 63.6675;
  - (17) Table 2d (items 4); and
  - (18) Table 6 (item 9)

(19) Table 8

(b) For the 100 KW natural gas-fired emergency generator, the Permittee shall comply with the following:

- (1) 40 CFR 63.6580
- (2) 40 CFR 63.6585
- (3) 40 CFR 63.6590(a)(2)(iii) and (c)(1)
- (4) 40 CFR 63.6665
- (5) 40 CFR 63.6670
- (6) 40 CFR 63.6675

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

Source Name: Ford Meter Box Company, Inc.  
Source Address: 775 Manchester Drive, Wabash, Indiana 46992  
Mailing Address: PO Box 398, 775 Manchester Ave., Wabash, Indiana 46992-0398  
Part 70 Permit No.: T 169-25077-00003

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

Please check what document is being certified:

- Annual Compliance Certification Letter
- Test Result (specify) \_\_\_\_\_.
- Report (specify) \_\_\_\_\_.
- Notification (specify) \_\_\_\_\_.
- Affidavit (specify) \_\_\_\_\_.
- Other (specify) \_\_\_\_\_.

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Phone:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE AND ENFORCEMENT BRANCH  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251  
Phone: (317) 233-0178  
Fax: (317) 233-6865**

**PART 70 OPERATING PERMIT  
EMERGENCY OCCURRENCE REPORT**

Source Name: Ford Meter Box Company, Inc.  
Source Address: 775 Manchester Drive, Wabash, Indiana 46992  
Mailing Address: PO Box 398, 775 Manchester Ave., Wabash, Indiana 46992-0398  
Part 70 Permit No.: T 169-25077-00003

**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: \_\_\_\_\_

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE AND ENFORCEMENT BRANCH  
PART 70 OPERATING PERMIT  
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: Ford Meter Box Company, Inc.  
Source Address: 775 Manchester Drive, Wabash, Indiana 46992  
Mailing Address: PO Box 398, 775 Manchester Ave., Wabash, Indiana 46992-0398  
Part 70 Permit No.: T169-25077-00003

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

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

**Attachment A to a Part 70 Operating Permit**

**Source Description and Location**

Source Name:	Ford Meter Box Company, Inc.
Source Location:	775 Manchester Drive, Wabash, Indiana 46992-1420
County:	Wabash County
SIC Code:	3366, 3362
Operation Permit No.:	T 169-25077-00003
Operation Permit Issuance Date:	December 8, 2009

**40 CFR 63, Subpart ZZZZZZ**

**40 CFR 63, Subpart ZZZZZZ National Emissions Standards for Hazardous Air Pollutants: Area Source for Aluminum, Copper, and Other Nonferrous Foundries**

Source: 74 FR 30393, June 25, 2009, unless otherwise noted.

**Applicability and Compliance Dates**

**§ 63.11544 Am I subject to this subpart?**

(a) You are subject to this subpart if you own or operate an aluminum foundry, copper foundry, or other nonferrous foundry as defined in § 63.11556, "What definitions apply to this subpart?" that is an area source of hazardous air pollutant (HAP) emissions as defined in § 63.2 and meets the criteria specified in paragraphs (a)(1) through (4) of this section. Once you are subject to this subpart, you must remain subject to this subpart even if you subsequently do not meet the criteria in paragraphs (a)(1) through (4) of this section.

(1) Your aluminum foundry uses material containing aluminum foundry HAP, as defined in § 63.11556, "What definitions apply to this subpart?"; or

(2) Your copper foundry uses material containing copper foundry HAP, as defined in § 63.11556, "What definitions apply to this subpart?"; or

(3) Your other nonferrous foundry uses material containing other nonferrous foundry HAP, as defined in § 63.11556, "What definitions apply to this subpart?".

(4) Your aluminum foundry, copper foundry, or other nonferrous foundry has an annual metal melt production (for existing affected sources) or an annual metal melt capacity (for new affected sources) of at least 600 tons per year (tpy) of aluminum, copper, and other nonferrous metals, including all associated alloys. You must determine the annual metal melt production and capacity for the time period as described in paragraphs (a)(4)(i) through (iv) of this section. The quantity of ferrous metals melted in iron or steel melting operations and the quantity of nonferrous metal melted in non-foundry melting operations are not included in determining the annual metal melt production for existing affected sources or the annual metal melt capacity for new affected sources.

(i) If you own or operate a melting operation at an aluminum, copper or other nonferrous foundry as of February 9, 2009, you must determine if you are subject to this rule based on your facility's annual metal melt production for calendar year 2010.

(ii) If you construct or reconstruct a melting operation at an aluminum, copper or other nonferrous foundry after February 9, 2009, you must determine if you are subject to this rule based on your facility's annual metal melt capacity at startup.

(iii) If your foundry with an existing melting operation increases production after calendar year 2010 such that the annual metal melt production equals or exceeds 600 tpy, you must submit a written notification of applicability to the Administrator within 30 days after the end of the calendar year and comply within 2 years after the date of the notification.

(iv) If your foundry with a new melting operation increases capacity after startup such that the annual metal melt capacity equals or exceeds 600 tpy, you must submit a written notification of applicability to the Administrator within 30 days after the capacity increase year and comply at the time of the capacity increase.

(b) This subpart applies to each new or existing affected source located at an aluminum, copper or other nonferrous foundry that is an area source as defined by § 63.2. The affected source is the collection of all melting operations located at an aluminum, copper, or other nonferrous foundry.

(c) An affected source is an existing source if you commenced construction or reconstruction of the affected source on or before February 9, 2009.

(d) An affected source is a new source if you commenced construction or reconstruction of the affected source after February 9, 2009.

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

(f) You are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71, provided you are not otherwise required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart applicable to area sources.

[74 FR 30393, June 25, 2009, as amended at 74 FR 46495, Sept. 10, 2009]

#### **§ 63.11545 What are my compliance dates?**

(a) If you own or operate an existing affected source, you must achieve compliance with the applicable provisions of this subpart no later than June 27, 2011.

(b) If you start up a new affected source on or before June 25, 2009, you must achieve compliance with the provisions of this subpart no later than June 25, 2009.

(c) If you start up a new affected source after June 25, 2009, you must achieve compliance with the provisions of this subpart upon startup of your affected source.

## Standards and Compliance Requirements

### § 63.11550 What are my standards and management practices?

(a) If you own or operate new or existing affected sources at an aluminum foundry, copper foundry, or other nonferrous foundry that is subject to this subpart, you must comply with the requirements in paragraphs (a)(1) through (3) of this section.

(1) Cover or enclose each melting furnace that is equipped with a cover or enclosure during the melting operation to the extent practicable (e.g., except when access is needed; including, but not limited to charging, alloy addition, and tapping).

(2) Purchase only metal scrap that has been depleted (to the extent practicable) of aluminum foundry HAP, copper foundry HAP, or other nonferrous foundry HAP (as applicable) in the materials charged to the melting furnace, except metal scrap that is purchased specifically for its HAP metal content for use in alloying or to meet specifications for the casting. This requirement does not apply to material that is not scrap (e.g., ingots, alloys, sows) or to materials that are not purchased (e.g., internal scrap, customer returns).

(3) Prepare and operate pursuant to a written management practices plan. The management practices plan must include the required management practices in paragraphs (a)(1) and (2) of this section and may include any other management practices that are implemented at the facility to minimize emissions from melting furnaces. You must inform your appropriate employees of the management practices that they must follow. You may use your standard operating procedures as the management practices plan provided the standard operating procedures include the required management practices in paragraphs (a)(1) and (2) of this section.

(b) If you own or operate a new or existing affected source that is located at a large foundry as defined in § 63.11556, you must comply with the additional requirements in paragraphs (b)(1) and (2) of this section.

(1) For existing affected sources located at a large foundry, you must achieve a particulate matter (PM) control efficiency of at least 95.0 percent or emit no more than an outlet PM concentration limit of 0.034 grams per dry standard cubic meter (g/dscm) (0.015 grains per dry standard cubic feet (gr/dscf)).

(2) For new affected sources located at a large foundry, you must achieve a PM control efficiency of at least 99.0 percent or emit no more than an outlet PM concentration limit of at most 0.023 g/dscm (0.010 gr/dscf).

(c) If you own or operate an affected source at a small foundry that subsequently becomes a large foundry after the applicable compliance date, you must meet the requirements in paragraphs (c)(1) through (3) of this section.

(1) You must notify the Administrator within 30 days after the capacity increase or the production increase, whichever is appropriate;

(2) You must modify any applicable permit limits within 30 days after the capacity increase or the production increase to reflect the current production or capacity, if not done so prior to the increase;

(3) You must comply with the PM control requirements in paragraph (b) of this section no later than 2 years from the date of issuance of the permit for the capacity increase or production increase, or in the case of no permit issuance, the date of the increase in capacity or production, whichever occurs first.

(d) These standards apply at all times.

### § 63.11551 What are my initial compliance requirements?

(a) Except as specified in paragraph (b) of this section, you must conduct a performance test for existing and new sources at a large copper or other nonferrous foundry that is subject to § 63.11550(b). You must conduct the test within 180 days of your compliance date and report the results in your Notification of Compliance Status according to § 63.9(h).

(b) If you own or operate an existing affected source at a large copper or other nonferrous foundry that is subject to § 63.11550(b), you are not required to conduct a performance test if a prior performance test was conducted within the past 5 years of the compliance date using the same methods specified in paragraph (c) of this section and you meet either of the following two conditions:

(1) No process changes have been made since the test; or

(2) You demonstrate to the satisfaction of the permitting authority that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process changes.

(c) You must conduct each performance test according to the requirements in § 63.7 and the requirements in paragraphs (c)(1) and (2) of this section.

(1) You must determine the concentration of PM (for the concentration standard) or the mass rate of PM in pounds per hour at the inlet and outlet of the control device (for the percent reduction standard) according to the following test methods:

(i) Method 1 or 1A (40 CFR part 60, appendix A-1) to select sampling port locations and the number of traverse points in each stack or duct. If you are complying with the concentration provision in § 63.11550(b), sampling sites must be located at the outlet of the control device and prior to any releases to the atmosphere. If you are complying with the percent reduction provision in § 63.11550(b), sampling sites must be located at the inlet and outlet of the control device and prior to any releases to the atmosphere.

(ii) Method 2, 2A, 2C, 2D, 2F (40 CFR part 60, appendix A-1), or Method 2G (40 CFR part 60, appendix A-2) to determine the volumetric flow rate of the stack gas.

(iii) Method 3, 3A, or 3B (40 CFR part 60, appendix A-2) to determine the dry molecular weight of the stack gas. You may use ANSI/ASME PTC 19.10-1981, "Flue and Exhaust Gas Analyses" (incorporated by reference—see § 63.14) as an alternative to EPA Method 3B.

(iv) Method 4 (40 CFR part 60, appendix A-3) to determine the moisture content of the stack gas.

(v) Method 5 or 5D (40 CFR part 60, appendix A-3) or Method 17 (40 CFR part 60, appendix A-6) to determine the concentration of PM or mass rate of PM (front half filterable catch only). If you choose to comply with the percent reduction PM standard, you must determine the mass rate of PM at the inlet and outlet in pounds per hour and calculate the percent reduction in PM.

(2) Three valid test runs are needed to comprise a performance test. Each run must cover at least one production cycle (charging, melting, and tapping).

(3) For a source with a single control device exhausted through multiple stacks, you must ensure that three runs are performed by a representative sampling of the stacks satisfactory to the Administrator or his or her delegated representative. You must provide data or an adequate explanation why the stack(s) chosen for testing are representative.

### § 63.11552 What are my monitoring requirements?

(a) You must record the information specified in § 63.11553(c)(2) to document conformance with the management practices plan required in § 63.11550(a).

(b) Except as specified in paragraph (b)(3) of this section, if you own or operate an existing affected source at a large foundry, you must conduct visible emissions monitoring according to the requirements in paragraphs (b)(1) and (2) of this section.

(1) You must conduct visual monitoring of the fabric filter discharge point(s) (outlets) for any VE according to the schedule specified in paragraphs (b)(1)(i) and (ii) of this section.

(i) You must perform a visual determination of emissions once per day, on each day the process is in operation, during melting operations.

(ii) If no VE are detected in consecutive daily visual monitoring performed in accordance with paragraph (b)(1)(i) of this section for 30 consecutive days or more of operation of the process, you may decrease the frequency of visual monitoring to once per calendar week of time the process is in operation, during melting operations. If VE are detected during these inspections, you must resume daily visual monitoring of that operation during each day that the process is in operation, in accordance with paragraph (b)(1)(i) of this section until you satisfy the criteria of this section to resume conducting weekly visual monitoring.

(2) If the visual monitoring reveals the presence of any VE, you must initiate procedures to determine the cause of the emissions within 1 hour of the initial observation and alleviate the cause of the emissions within 3 hours of initial observation by taking whatever corrective action(s) are necessary. You may take more than 3 hours to alleviate a specific condition that causes VE if you identify in the monitoring plan this specific condition as one that could lead to VE in advance, you adequately explain why it is not feasible to alleviate this condition within 3 hours of the time the VE occurs, and you demonstrate that the requested time will ensure alleviation of this condition as expeditiously as practicable.

(3) As an alternative to the monitoring requirements for an existing affected source in paragraphs (b)(1) and (2) of this section, you may install, operate, and maintain a bag leak detection system for each fabric filter according to the requirements in paragraph (c) of this section.

(c) If you own or operate a new affected source located at a large foundry subject to the PM requirements in § 63.11550(b)(2) that is equipped with a fabric filter, you must install, operate, and maintain a bag leak detection system for each fabric filter according to paragraphs (c)(1) through (4) of this section.

(1) Each bag leak detection system must meet the specifications and requirements in paragraphs (c)(1)(i) through (viii) of this section.

(i) The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 1 milligram per actual cubic meter (0.00044 grains per actual cubic foot) or less.

(ii) The bag leak detection system sensor must provide output of relative PM loadings. You must 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).

(iii) The bag leak detection system must be equipped with an alarm system that will sound when the system detects an increase in relative particulate loading over the alarm set point established according to paragraph (c)(1)(iv) of this section, and the alarm must be located such that it can be heard by the appropriate plant personnel.

(iv) In the initial adjustment of the bag leak detection system, you must establish, at a minimum, the baseline output by adjusting the sensitivity (range) and the averaging period of the device, the alarm set points, and the alarm delay time.

(v) Following initial adjustment, you must not adjust the averaging period, alarm set point, or alarm delay time without approval from the Administrator or delegated authority, except as provided in paragraph (c)(1)(vi) of this section.

(vi) Once per quarter, you may adjust the sensitivity of the bag leak detection system to account for seasonal effects, including temperature and humidity, according to the procedures identified in the site-specific monitoring plan required by paragraph (c)(2) of this section.

(vii) You must install the bag leak detection sensor downstream of the fabric filter.

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

(2) You must prepare a site-specific monitoring plan for each bag leak detection system. You must operate and maintain each bag leak detection system according to the plan at all times. Each monitoring plan must describe the items in paragraphs (c)(2)(i) through (vi) of this section.

(i) Installation of the bag leak detection system;

(ii) Initial and periodic adjustment of the bag leak detection system, including how the alarm set-point and alarm delay time 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; and

(vi) Corrective action procedures as specified in paragraph (c)(3) of this section.

(3) Except as provided in paragraph (c)(4) of this section, you must initiate procedures to determine the cause of every alarm from a bag leak detection system within 1 hour of the alarm and alleviate the cause of the alarm within 3 hours of the alarm by taking whatever corrective action(s) are necessary. Corrective actions may include, but are not limited to, the following:

(i) Inspecting the fabric filter for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in PM 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 fabric filter compartment;

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

(4) You may take more than 3 hours to alleviate a specific condition that causes an alarm if you identify in the monitoring plan this specific condition as one that could lead to an alarm, adequately explain why it is not feasible to alleviate this condition within 3 hours of the time the alarm occurs, and demonstrate that the requested time will ensure alleviation of this condition as expeditiously as practicable.

(d) If you use a control device other than a fabric filter for new or existing affected sources subject to § 63.11550(b), you must submit a request to use an alternative monitoring procedure as required in § 63.8(f)(4).

### **§ 63.11553 What are my notification, reporting, and recordkeeping requirements?**

(a) You must submit the Initial Notification required by § 63.9(b)(2) no later than 120 calendar days after June 25, 2009 or within 120 days after the source becomes subject to the standard. The Initial Notification must include the information specified in paragraphs (a)(1) through (3) of this section and may be combined with the Notification of Compliance Status required in paragraph (b) of this section.

(1) The name and address of the owner or operator;

(2) The address (i.e., physical location) of the affected source; and

(3) An identification of the relevant standard, or other requirement, that is the basis of the notification and source's compliance date.

(b) You must submit the Notification of Compliance Status required by § 63.9(h) no later than 120 days after the applicable compliance date specified in § 63.11545 unless you must conduct a performance test. If you must conduct a performance test, you must submit the Notification of Compliance Status within 60 days of completing the performance test. Your Notification of Compliance Status must indicate if you are a small or large foundry as defined in § 63.11556, the production amounts as the basis for the determination, and if you are a large foundry, whether you elect to comply with the control efficiency requirement or PM concentration limit in § 63.11550(b). In addition to the information required in § 63.9(h)(2) and § 63.11551, your notification must include the following certification(s) of compliance, as applicable, and signed by a responsible official:

(1) "This facility will operate in a manner that minimizes HAP emissions from the melting operations to the extent possible. This includes at a minimum that the owners and/or operators of the affected source will cover or enclose each melting furnace that is equipped with a cover or enclosure during melting operations to the extent practicable as required in 63.11550(a)(1)."

(2) "This facility agrees to purchase only metal scrap that has been depleted (to the extent practicable) of aluminum foundry HAP, copper foundry HAP, or other nonferrous foundries HAP (as applicable) in the materials charged to the melting furnace, except for metal scrap that is purchased specifically for its HAP metal content for use in alloying or to meet specifications for the casting as required by 63.11550(a)(2)."

(3) "This facility has prepared and will operate by a written management practices plan according to § 63.11550(a)(3)."

(4) If the owner or operator of an existing affected source at a large foundry is certifying compliance based on the results of a previous performance test: "This facility complies with § 63.11550(b) based on a previous performance test in accordance with § 63.11551(b)."

(5) This certification of compliance is required by the owner or operator that installs bag leak detection systems: "This facility has installed a bag leak detection system in accordance with § 63.11552(b)(3) or

(c), has prepared a bag leak detection system monitoring plan in accordance with § 63.11552(c), and will operate each bag leak detection system according to the plan.”

(c) You must keep the records specified in paragraphs (c)(1) through (5) of this section.

(1) As required in § 63.10(b)(2)(xiv), you must keep a copy of each notification that you submitted to comply with this subpart and all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted.

(2) You must keep records to document conformance with the management practices plan required by § 63.11550 as specified in paragraphs (c)(2)(i) and (ii) of this section.

(i) For melting furnaces equipped with a cover or enclosure, records must identify each melting furnace equipped with a cover or enclosure and document that the procedures in the management practices plan were followed during the monthly inspections. These records may be in the form of a checklist.

(ii) Records documenting that you purchased only metal scrap that has been depleted of HAP metals (to the extent practicable) charged to the melting furnace. If you purchase scrap metal specifically for the HAP metal content for use in alloying or to meet specifications for the casting, you must keep records to document that the HAP metal is included in the material specifications for the cast metal product.

(3) You must keep the records of all performance tests, inspections and monitoring data required by §§ 63.11551 and 63.11552, and the information identified in paragraphs (c)(3)(i) through (vi) of this section for each required inspection or monitoring.

(i) The date, place, and time of the monitoring event;

(ii) Person conducting the monitoring;

(iii) Technique or method used;

(iv) Operating conditions during the activity;

(v) Results, including the date, time, and duration of the period from the time the monitoring indicated a problem (e.g., VE) to the time that monitoring indicated proper operation; and

(vi) Maintenance or corrective action taken (if applicable).

(4) If you own or operate a new or existing affected source at a small foundry that is not subject to § 63.11550(b), you must maintain records to document that your facility melts less than 6,000 tpy total of copper, other nonferrous metal, and all associated alloys (excluding aluminum) in each calendar year.

(5) If you use a bag leak detection system, you must keep the records specified in paragraphs (c)(5)(i) through (iii) of this section.

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

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

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

(d) Your records must be in a form suitable and readily available for expeditious review, according to § 63.10(b)(1). As specified in § 63.10(b)(1), you must keep each record for 5 years following the date of each recorded action. For records of annual metal melt production, you must keep the records for 5 years from the end of the calendar year. You must keep each record onsite for at least 2 years after the date of each recorded action according to § 63.10(b)(1). You may keep the records offsite for the remaining 3 years.

(e) If a deviation occurs during a semiannual reporting period, you must submit a compliance report to your permitting authority according to the requirements in paragraphs (e)(1) and (2) of this section.

(1) The first reporting period covers the period beginning on the compliance date specified in § 63.11545 and ending on June 30 or December 31, whichever date comes first after your compliance date. Each subsequent reporting period covers the semiannual period from January 1 through June 30 or from July 1 through December 31. Your 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.

(2) A compliance report must include the information in paragraphs (e)(2)(i) through (iv) of this section.

(i) Company name and address.

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

(iii) Date of the report and beginning and ending dates of the reporting period.

(iv) Identification of the affected source, the pollutant being monitored, applicable requirement, description of deviation, and corrective action taken.

[74 FR 30393, June 25, 2009, as amended at 74 FR 46495, Sept. 10, 2009]

## **Other Requirements and Information**

### **§ 63.11555 What General Provisions apply to this subpart?**

Table 1 to this subpart shows which parts of the General Provisions in §§ 63.1 through 63.16 apply to you.

### **§ 63.11556 What definitions apply to this subpart?**

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

*Aluminum foundry* means a facility that melts aluminum and pours molten aluminum into molds to manufacture aluminum castings (except die casting) that are complex shapes. For purposes of this subpart, this definition does not include primary or secondary metal producers that cast molten aluminum to produce simple shapes such as sows, ingots, bars, rods, or billets.

*Aluminum foundry HAP* means any compound of the following metals: beryllium, cadmium, lead, manganese, or nickel, or any of these metals in the elemental form.

*Annual copper and other nonferrous foundry metal melt capacity* means, for new affected sources, the lower of the copper and other nonferrous metal melting operation capacity, assuming 8,760 operating hours per year or, if applicable, the maximum permitted copper and other nonferrous metal melting operation production rate for the melting operation calculated on an annual basis. Unless otherwise specified in the permit, permitted copper and other nonferrous metal melting operation rates that are not specified on an annual basis must be annualized assuming 24 hours per day, 365 days per year of operation. If the permit limits the operating hours of the melting operation(s) or foundry, then the permitted operating hours are used to annualize the maximum permitted copper and other nonferrous metal melt production rate. The annual copper and other nonferrous metal melt capacity does not include the melt capacity for ferrous metal melted in iron or steel foundry melting operations that are co-located with copper or other nonferrous melting operations or the nonferrous metal melted in non-foundry melting operations.

*Annual copper and other nonferrous foundry metal melt production* means, for existing affected sources, the quantity of copper and other nonferrous metal melted in melting operations at the foundry in a given calendar year. For the purposes of this subpart, metal melt production is determined on the basis of the quantity of metal charged to the melting operations. The annual copper and nonferrous metal melt production does not include the melt production of ferrous metal melted in iron or steel foundry melting operations that are co-located with copper and other nonferrous melting operations or the nonferrous metal melted in non-foundry melting operations.

*Annual metal melt capacity*, for new affected sources, means the lower of the aluminum, copper, and other nonferrous metal melting operation capacity, assuming 8,760 operating hours per year or, if applicable, the maximum permitted aluminum, copper, and other nonferrous metal melting operation production rate for the melting operation calculated on an annual basis. Unless otherwise specified in the permit, permitted aluminum, copper, and other nonferrous metal melting operation rates that are not specified on an annual basis must be annualized assuming 24 hours per day, 365 days per year of operation. If the permit limits the operating hours of the melting operation(s) or foundry, then the permitted operating hours are used to annualize the maximum permitted aluminum, copper, and other nonferrous metal melt production rate. The annual metal melt capacity does not include the melt capacity for ferrous metal melted in iron or steel foundry melting operations that are co-located with aluminum, copper, or other nonferrous melting operations or the nonferrous metal melted in non-foundry melting operations.

*Annual metal melt production* means, for existing affected sources, the quantity of aluminum, copper, and other nonferrous metal melted in melting operations at the foundry in a given calendar year. For the purposes of this subpart, annual metal melt production is determined on the basis of the quantity of metal charged to the melting operations. The annual metal melt production does not include the melt production of ferrous metal melted in iron or steel foundry melting operations that are co-located with aluminum, copper, or other nonferrous melting operations or the nonferrous metal melted in non-foundry melting operations.

*Bag leak detection system* means a system that is capable of continuously monitoring relative PM ( *i.e.*, 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, light scattering, light transmittance, or other effect to continuously monitor relative PM loadings.

*Copper foundry* means a foundry that melts copper or copper-based alloys and pours molten copper or copper-based alloys into molds to manufacture copper or copper-based alloy castings (excluding die casting) that are complex shapes. For purposes of this subpart, this definition does not include primary or secondary metal producers that cast molten copper to produce simple shapes such as sows, ingots, billets, bars, anode copper, rods, or copper cake.

*Copper foundry HAP* means any compound of any of the following metals: lead, manganese, or nickel, or any of these metals in the elemental form.

*Deviation* means any instance where 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 emissions limitation 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 emissions limitation in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.

*Die casting* means operations classified under the North American Industry Classification System codes 331521 (Aluminum Die-Casting Foundries) and 331522 (Nonferrous (except Aluminum) Die-Casting Foundries) and comprises establishments primarily engaged in introducing molten aluminum, copper, and other nonferrous metal, under high pressure, into molds or dies to make die-castings.

*Large foundry* means, for an existing affected source, a copper or other nonferrous foundry with an annual metal melt production of copper, other nonferrous metals, and all associated alloys (excluding aluminum) of 6,000 tons or greater. For a new affected source, *large foundry* means a copper or other nonferrous foundry with an annual metal melt capacity of copper, other nonferrous metals, and all associated alloys (excluding aluminum) of 6,000 tons or greater.

*Material containing aluminum foundry HAP* means a material containing one or more aluminum foundry HAP. Any material that contains beryllium, cadmium, lead, or nickel in amounts greater than or equal to 0.1 percent by weight (as the metal), or contains manganese in amounts greater than or equal to 1.0 percent by weight (as the metal), as shown in formulation data provided by the manufacturer or supplier, such as the Material Safety Data Sheet for the material, is considered to be a material containing aluminum foundry HAP.

*Material containing copper foundry HAP* means a material containing one or more copper foundry HAP. Any material that contains lead or nickel in amounts greater than or equal to 0.1 percent by weight (as the metal), or contains manganese in amounts greater than or equal to 1.0 percent by weight (as the metal), as shown in formulation data provided by the manufacturer or supplier, such as the Material Safety Data Sheet for the material, is considered to be a material containing copper foundry HAP.

*Material containing other nonferrous foundry HAP* means a material containing one or more other nonferrous foundry HAP. Any material that contains chromium, lead, or nickel in amounts greater than or equal to 0.1 percent by weight (as the metal), as shown in formulation data provided by the manufacturer or supplier, such as the Material Safety Data Sheet for the material, is considered to be a material containing other nonferrous foundry HAP.

*Melting operations* (the affected source) means the collection of furnaces ( e.g., induction, reverberatory, crucible, tower, dry hearth) used to melt metal ingot, alloyed ingot and/or metal scrap to produce molten metal that is poured into molds to make castings. Melting operations dedicated to melting ferrous metal at an iron and steel foundry are not included in this definition and are not part of the affected source.

*Other nonferrous foundry* means a facility that melts nonferrous metals other than aluminum, copper, or copper-based alloys and pours the nonferrous metals into molds to manufacture nonferrous metal castings (excluding die casting) that are complex shapes. For purposes of this subpart, this definition does not include primary or secondary metal producers that cast molten nonferrous metals to produce simple shapes such as sows, ingots, bars, rods, or billets.

*Other nonferrous foundry HAP* means any compound of the following metals: chromium, lead, and nickel, or any of these metals in the elemental form.

*Small foundry* means, for an existing affected source, a copper or other nonferrous foundry with an annual metal melt production of copper, other nonferrous metals, and all associated alloys (excluding aluminum) of less than 6,000 tons. For a new affected source, *small foundry* means a copper or other nonferrous foundry with an annual metal melt capacity of copper, other nonferrous metals, and all associated alloys (excluding aluminum) of less than 6,000 tons.

**§ 63.11557 Who implements and enforces this subpart?**

(a) This subpart can be implemented and enforced by the U.S. 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 has the authority to implement and enforce this subpart. You should contact your U.S. EPA Regional Office to find out if 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 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 applicability requirements in § 63.11544, the compliance date requirements in § 63.11545, and the applicable standards in § 63.11550.

(2) Approval of an alternative nonopacity emissions standard under § 63.6(g).

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

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

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

**§ 63.11558 [Reserved]**

**Table 1 to Subpart ZZZZZZ of Part 63—Applicability of General Provisions to Aluminum, Copper, and Other Nonferrous Foundries Area Sources**

As required in § 63.11555, “What General Provisions apply to this subpart?,” you must comply with each requirement in the following table that applies to you.

Citation	Subject	Applies to subpart ZZZZZZ?	Explanation
§ 63.1(a)(1), (a)(2), (a)(3), (a)(4), (a)(6), (a)(10)-(a)(12), (b)(1), (b)(3), (c)(1), (c)(2), (c)(5), (e)	Applicability	Yes	§ 63.11544(f) exempts affected sources from the obligation to obtain a title V operating permit.
§ 63.1(a)(5), (a)(7)-(a)(9), (b)(2), (c)(3), (c)(4), (d)	Reserved	No	
§ 63.2	Definitions	Yes	
§ 63.3	Units and Abbreviations	Yes	
§ 63.4	Prohibited Activities and Circumvention	Yes	
§ 63.5	Preconstruction Review and Notification Requirements	Yes	
§ 63.6(a), (b)(1)-(b)(5), (b)(7), (c)(1), (c)(2), (c)(5), (e)(1), (e)(3)(i), (e)(3)(iii)-(e)(3)(ix), (f)(2), (f)(3), (g), (i), (j)	Compliance with Standards and Maintenance Requirements	Yes	
§ 63.6(f)(1)	Compliance with Nonopacity Emission Standards	No	Subpart ZZZZZZ requires continuous compliance with all requirements in this subpart.
§ 63.6(h)(1), (h)(2), (h)(5)-(h)(9)	Compliance with Opacity and Visible Emission Limits	No	Subpart ZZZZZZ does not contain opacity or visible emission limits.
§ 63.6(b)(6), (c)(3), (c)(4), (d), (e)(2), (e)(3)(ii), (h)(3), (h)(5)(iv)	Reserved	No	
§ 63.7	Applicability and Performance Test Dates	Yes	
§ 63.8(a)(1), (b)(1), (f)(1)-(5), (g)	Monitoring Requirements	Yes	
§ 63.8(a)(2), (a)(4), (b)(2)-(3), (c), (d), (e), (f)(6), (g)	Continuous Monitoring Systems	No	Subpart ZZZZZZ does not require a flare or CPMS, COMS or CEMS.
§ 63.8(a)(3)	[Reserved]	No	

Citation	Subject	Applies to subpart ZZZZZZ?	Explanation
§ 63.9(a), (b)(1), (b)(2)(i)-(iii), (b)(5), (c), (d), (e), (h)(1)-(h)(3), (h)(5), (h)(6), (j)	Notification Requirements	Yes	Subpart ZZZZZZ requires submission of Notification of Compliance Status within 120 days of compliance date unless a performance test is required.
§ 63.9(b)(2)(iv)-(v), (b)(4), (f), (g), (i)	No		
§ 63.9(b)(3), (h)(4)	Reserved	No	
§ 63.10(a), (b)(1), (b)(2)(i)-(v), (vii), (vii)(C), (viii), (ix), (b)(3), (d)(1)-(2), (d)(4), (d)(5), (f)	Recordkeeping and Reporting Requirements	Yes	
§ 63.10(b)(2)(vi), (b)(2)(vii)(A)-(B), (c), (d)(3), (e)	No	Subpart ZZZZZZ does not require a CPMS, COMS, CEMS, or opacity or visible emissions limit.	
§ 63.10(c)(2)-(c)(4), (c)(9)	Reserved	No	
§ 63.11	Control Device Requirements	No	
§ 63.12	State Authority and Delegations	Yes	
§§ 63.13-63.16	Addresses, Incorporations by Reference, Availability of Information, Performance Track Provisions	Yes	

**Indiana Department of Environmental Management  
Office of Air Quality**

**Attachment A to a Part 70 Operating Permit**

**Source Description and Location**

Source Name:	Ford Meter Box Company, Inc.
Source Location:	775 Manchester Drive, Wabash, Indiana 46992-1420
County:	Wabash County
SIC Code:	3366, 3362
Operation Permit No.:	T 169-25077-00003
Operation Permit Issuance Date:	December 8, 2009

**40 CFR 63, Subpart ZZZZZZ**

**40 CFR 63, Subpart ZZZZZZ National Emissions Standards for Hazardous Air Pollutants: Area Source for Aluminum, Copper, and Other Nonferrous Foundries**

Source: 74 FR 30393, June 25, 2009, unless otherwise noted.

**Applicability and Compliance Dates**

**§ 63.11544 Am I subject to this subpart?**

(a) You are subject to this subpart if you own or operate an aluminum foundry, copper foundry, or other nonferrous foundry as defined in § 63.11556, "What definitions apply to this subpart?" that is an area source of hazardous air pollutant (HAP) emissions as defined in § 63.2 and meets the criteria specified in paragraphs (a)(1) through (4) of this section. Once you are subject to this subpart, you must remain subject to this subpart even if you subsequently do not meet the criteria in paragraphs (a)(1) through (4) of this section.

(1) Your aluminum foundry uses material containing aluminum foundry HAP, as defined in § 63.11556, "What definitions apply to this subpart?"; or

(2) Your copper foundry uses material containing copper foundry HAP, as defined in § 63.11556, "What definitions apply to this subpart?"; or

(3) Your other nonferrous foundry uses material containing other nonferrous foundry HAP, as defined in § 63.11556, "What definitions apply to this subpart?".

(4) Your aluminum foundry, copper foundry, or other nonferrous foundry has an annual metal melt production (for existing affected sources) or an annual metal melt capacity (for new affected sources) of at least 600 tons per year (tpy) of aluminum, copper, and other nonferrous metals, including all associated alloys. You must determine the annual metal melt production and capacity for the time period as described in paragraphs (a)(4)(i) through (iv) of this section. The quantity of ferrous metals melted in iron or steel melting operations and the quantity of nonferrous metal melted in non-foundry melting operations are not included in determining the annual metal melt production for existing affected sources or the annual metal melt capacity for new affected sources.

(i) If you own or operate a melting operation at an aluminum, copper or other nonferrous foundry as of February 9, 2009, you must determine if you are subject to this rule based on your facility's annual metal melt production for calendar year 2010.

(ii) If you construct or reconstruct a melting operation at an aluminum, copper or other nonferrous foundry after February 9, 2009, you must determine if you are subject to this rule based on your facility's annual metal melt capacity at startup.

(iii) If your foundry with an existing melting operation increases production after calendar year 2010 such that the annual metal melt production equals or exceeds 600 tpy, you must submit a written notification of applicability to the Administrator within 30 days after the end of the calendar year and comply within 2 years after the date of the notification.

(iv) If your foundry with a new melting operation increases capacity after startup such that the annual metal melt capacity equals or exceeds 600 tpy, you must submit a written notification of applicability to the Administrator within 30 days after the capacity increase year and comply at the time of the capacity increase.

(b) This subpart applies to each new or existing affected source located at an aluminum, copper or other nonferrous foundry that is an area source as defined by § 63.2. The affected source is the collection of all melting operations located at an aluminum, copper, or other nonferrous foundry.

(c) An affected source is an existing source if you commenced construction or reconstruction of the affected source on or before February 9, 2009.

(d) An affected source is a new source if you commenced construction or reconstruction of the affected source after February 9, 2009.

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

(f) You are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71, provided you are not otherwise required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart applicable to area sources.

[74 FR 30393, June 25, 2009, as amended at 74 FR 46495, Sept. 10, 2009]

#### **§ 63.11545 What are my compliance dates?**

(a) If you own or operate an existing affected source, you must achieve compliance with the applicable provisions of this subpart no later than June 27, 2011.

(b) If you start up a new affected source on or before June 25, 2009, you must achieve compliance with the provisions of this subpart no later than June 25, 2009.

(c) If you start up a new affected source after June 25, 2009, you must achieve compliance with the provisions of this subpart upon startup of your affected source.

## Standards and Compliance Requirements

### § 63.11550 What are my standards and management practices?

(a) If you own or operate new or existing affected sources at an aluminum foundry, copper foundry, or other nonferrous foundry that is subject to this subpart, you must comply with the requirements in paragraphs (a)(1) through (3) of this section.

(1) Cover or enclose each melting furnace that is equipped with a cover or enclosure during the melting operation to the extent practicable (e.g., except when access is needed; including, but not limited to charging, alloy addition, and tapping).

(2) Purchase only metal scrap that has been depleted (to the extent practicable) of aluminum foundry HAP, copper foundry HAP, or other nonferrous foundry HAP (as applicable) in the materials charged to the melting furnace, except metal scrap that is purchased specifically for its HAP metal content for use in alloying or to meet specifications for the casting. This requirement does not apply to material that is not scrap (e.g., ingots, alloys, sows) or to materials that are not purchased (e.g., internal scrap, customer returns).

(3) Prepare and operate pursuant to a written management practices plan. The management practices plan must include the required management practices in paragraphs (a)(1) and (2) of this section and may include any other management practices that are implemented at the facility to minimize emissions from melting furnaces. You must inform your appropriate employees of the management practices that they must follow. You may use your standard operating procedures as the management practices plan provided the standard operating procedures include the required management practices in paragraphs (a)(1) and (2) of this section.

(b) If you own or operate a new or existing affected source that is located at a large foundry as defined in § 63.11556, you must comply with the additional requirements in paragraphs (b)(1) and (2) of this section.

(1) For existing affected sources located at a large foundry, you must achieve a particulate matter (PM) control efficiency of at least 95.0 percent or emit no more than an outlet PM concentration limit of 0.034 grams per dry standard cubic meter (g/dscm) (0.015 grains per dry standard cubic feet (gr/dscf)).

(2) For new affected sources located at a large foundry, you must achieve a PM control efficiency of at least 99.0 percent or emit no more than an outlet PM concentration limit of at most 0.023 g/dscm (0.010 gr/dscf).

(c) If you own or operate an affected source at a small foundry that subsequently becomes a large foundry after the applicable compliance date, you must meet the requirements in paragraphs (c)(1) through (3) of this section.

(1) You must notify the Administrator within 30 days after the capacity increase or the production increase, whichever is appropriate;

(2) You must modify any applicable permit limits within 30 days after the capacity increase or the production increase to reflect the current production or capacity, if not done so prior to the increase;

(3) You must comply with the PM control requirements in paragraph (b) of this section no later than 2 years from the date of issuance of the permit for the capacity increase or production increase, or in the case of no permit issuance, the date of the increase in capacity or production, whichever occurs first.

(d) These standards apply at all times.

### § 63.11551 What are my initial compliance requirements?

(a) Except as specified in paragraph (b) of this section, you must conduct a performance test for existing and new sources at a large copper or other nonferrous foundry that is subject to § 63.11550(b). You must conduct the test within 180 days of your compliance date and report the results in your Notification of Compliance Status according to § 63.9(h).

(b) If you own or operate an existing affected source at a large copper or other nonferrous foundry that is subject to § 63.11550(b), you are not required to conduct a performance test if a prior performance test was conducted within the past 5 years of the compliance date using the same methods specified in paragraph (c) of this section and you meet either of the following two conditions:

(1) No process changes have been made since the test; or

(2) You demonstrate to the satisfaction of the permitting authority that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process changes.

(c) You must conduct each performance test according to the requirements in § 63.7 and the requirements in paragraphs (c)(1) and (2) of this section.

(1) You must determine the concentration of PM (for the concentration standard) or the mass rate of PM in pounds per hour at the inlet and outlet of the control device (for the percent reduction standard) according to the following test methods:

(i) Method 1 or 1A (40 CFR part 60, appendix A-1) to select sampling port locations and the number of traverse points in each stack or duct. If you are complying with the concentration provision in § 63.11550(b), sampling sites must be located at the outlet of the control device and prior to any releases to the atmosphere. If you are complying with the percent reduction provision in § 63.11550(b), sampling sites must be located at the inlet and outlet of the control device and prior to any releases to the atmosphere.

(ii) Method 2, 2A, 2C, 2D, 2F (40 CFR part 60, appendix A-1), or Method 2G (40 CFR part 60, appendix A-2) to determine the volumetric flow rate of the stack gas.

(iii) Method 3, 3A, or 3B (40 CFR part 60, appendix A-2) to determine the dry molecular weight of the stack gas. You may use ANSI/ASME PTC 19.10-1981, "Flue and Exhaust Gas Analyses" (incorporated by reference—see § 63.14) as an alternative to EPA Method 3B.

(iv) Method 4 (40 CFR part 60, appendix A-3) to determine the moisture content of the stack gas.

(v) Method 5 or 5D (40 CFR part 60, appendix A-3) or Method 17 (40 CFR part 60, appendix A-6) to determine the concentration of PM or mass rate of PM (front half filterable catch only). If you choose to comply with the percent reduction PM standard, you must determine the mass rate of PM at the inlet and outlet in pounds per hour and calculate the percent reduction in PM.

(2) Three valid test runs are needed to comprise a performance test. Each run must cover at least one production cycle (charging, melting, and tapping).

(3) For a source with a single control device exhausted through multiple stacks, you must ensure that three runs are performed by a representative sampling of the stacks satisfactory to the Administrator or his or her delegated representative. You must provide data or an adequate explanation why the stack(s) chosen for testing are representative.

### § 63.11552 What are my monitoring requirements?

(a) You must record the information specified in § 63.11553(c)(2) to document conformance with the management practices plan required in § 63.11550(a).

(b) Except as specified in paragraph (b)(3) of this section, if you own or operate an existing affected source at a large foundry, you must conduct visible emissions monitoring according to the requirements in paragraphs (b)(1) and (2) of this section.

(1) You must conduct visual monitoring of the fabric filter discharge point(s) (outlets) for any VE according to the schedule specified in paragraphs (b)(1)(i) and (ii) of this section.

(i) You must perform a visual determination of emissions once per day, on each day the process is in operation, during melting operations.

(ii) If no VE are detected in consecutive daily visual monitoring performed in accordance with paragraph (b)(1)(i) of this section for 30 consecutive days or more of operation of the process, you may decrease the frequency of visual monitoring to once per calendar week of time the process is in operation, during melting operations. If VE are detected during these inspections, you must resume daily visual monitoring of that operation during each day that the process is in operation, in accordance with paragraph (b)(1)(i) of this section until you satisfy the criteria of this section to resume conducting weekly visual monitoring.

(2) If the visual monitoring reveals the presence of any VE, you must initiate procedures to determine the cause of the emissions within 1 hour of the initial observation and alleviate the cause of the emissions within 3 hours of initial observation by taking whatever corrective action(s) are necessary. You may take more than 3 hours to alleviate a specific condition that causes VE if you identify in the monitoring plan this specific condition as one that could lead to VE in advance, you adequately explain why it is not feasible to alleviate this condition within 3 hours of the time the VE occurs, and you demonstrate that the requested time will ensure alleviation of this condition as expeditiously as practicable.

(3) As an alternative to the monitoring requirements for an existing affected source in paragraphs (b)(1) and (2) of this section, you may install, operate, and maintain a bag leak detection system for each fabric filter according to the requirements in paragraph (c) of this section.

(c) If you own or operate a new affected source located at a large foundry subject to the PM requirements in § 63.11550(b)(2) that is equipped with a fabric filter, you must install, operate, and maintain a bag leak detection system for each fabric filter according to paragraphs (c)(1) through (4) of this section.

(1) Each bag leak detection system must meet the specifications and requirements in paragraphs (c)(1)(i) through (viii) of this section.

(i) The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 1 milligram per actual cubic meter (0.00044 grains per actual cubic foot) or less.

(ii) The bag leak detection system sensor must provide output of relative PM loadings. You must 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).

(iii) The bag leak detection system must be equipped with an alarm system that will sound when the system detects an increase in relative particulate loading over the alarm set point established according to paragraph (c)(1)(iv) of this section, and the alarm must be located such that it can be heard by the appropriate plant personnel.

(iv) In the initial adjustment of the bag leak detection system, you must establish, at a minimum, the baseline output by adjusting the sensitivity (range) and the averaging period of the device, the alarm set points, and the alarm delay time.

(v) Following initial adjustment, you must not adjust the averaging period, alarm set point, or alarm delay time without approval from the Administrator or delegated authority, except as provided in paragraph (c)(1)(vi) of this section.

(vi) Once per quarter, you may adjust the sensitivity of the bag leak detection system to account for seasonal effects, including temperature and humidity, according to the procedures identified in the site-specific monitoring plan required by paragraph (c)(2) of this section.

(vii) You must install the bag leak detection sensor downstream of the fabric filter.

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

(2) You must prepare a site-specific monitoring plan for each bag leak detection system. You must operate and maintain each bag leak detection system according to the plan at all times. Each monitoring plan must describe the items in paragraphs (c)(2)(i) through (vi) of this section.

(i) Installation of the bag leak detection system;

(ii) Initial and periodic adjustment of the bag leak detection system, including how the alarm set-point and alarm delay time 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; and

(vi) Corrective action procedures as specified in paragraph (c)(3) of this section.

(3) Except as provided in paragraph (c)(4) of this section, you must initiate procedures to determine the cause of every alarm from a bag leak detection system within 1 hour of the alarm and alleviate the cause of the alarm within 3 hours of the alarm by taking whatever corrective action(s) are necessary. Corrective actions may include, but are not limited to, the following:

(i) Inspecting the fabric filter for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in PM 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 fabric filter compartment;

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

(4) You may take more than 3 hours to alleviate a specific condition that causes an alarm if you identify in the monitoring plan this specific condition as one that could lead to an alarm, adequately explain why it is not feasible to alleviate this condition within 3 hours of the time the alarm occurs, and demonstrate that the requested time will ensure alleviation of this condition as expeditiously as practicable.

(d) If you use a control device other than a fabric filter for new or existing affected sources subject to § 63.11550(b), you must submit a request to use an alternative monitoring procedure as required in § 63.8(f)(4).

### **§ 63.11553 What are my notification, reporting, and recordkeeping requirements?**

(a) You must submit the Initial Notification required by § 63.9(b)(2) no later than 120 calendar days after June 25, 2009 or within 120 days after the source becomes subject to the standard. The Initial Notification must include the information specified in paragraphs (a)(1) through (3) of this section and may be combined with the Notification of Compliance Status required in paragraph (b) of this section.

(1) The name and address of the owner or operator;

(2) The address (i.e., physical location) of the affected source; and

(3) An identification of the relevant standard, or other requirement, that is the basis of the notification and source's compliance date.

(b) You must submit the Notification of Compliance Status required by § 63.9(h) no later than 120 days after the applicable compliance date specified in § 63.11545 unless you must conduct a performance test. If you must conduct a performance test, you must submit the Notification of Compliance Status within 60 days of completing the performance test. Your Notification of Compliance Status must indicate if you are a small or large foundry as defined in § 63.11556, the production amounts as the basis for the determination, and if you are a large foundry, whether you elect to comply with the control efficiency requirement or PM concentration limit in § 63.11550(b). In addition to the information required in § 63.9(h)(2) and § 63.11551, your notification must include the following certification(s) of compliance, as applicable, and signed by a responsible official:

(1) "This facility will operate in a manner that minimizes HAP emissions from the melting operations to the extent possible. This includes at a minimum that the owners and/or operators of the affected source will cover or enclose each melting furnace that is equipped with a cover or enclosure during melting operations to the extent practicable as required in 63.11550(a)(1)."

(2) "This facility agrees to purchase only metal scrap that has been depleted (to the extent practicable) of aluminum foundry HAP, copper foundry HAP, or other nonferrous foundries HAP (as applicable) in the materials charged to the melting furnace, except for metal scrap that is purchased specifically for its HAP metal content for use in alloying or to meet specifications for the casting as required by 63.11550(a)(2)."

(3) "This facility has prepared and will operate by a written management practices plan according to § 63.11550(a)(3)."

(4) If the owner or operator of an existing affected source at a large foundry is certifying compliance based on the results of a previous performance test: "This facility complies with § 63.11550(b) based on a previous performance test in accordance with § 63.11551(b)."

(5) This certification of compliance is required by the owner or operator that installs bag leak detection systems: "This facility has installed a bag leak detection system in accordance with § 63.11552(b)(3) or

(c), has prepared a bag leak detection system monitoring plan in accordance with § 63.11552(c), and will operate each bag leak detection system according to the plan.”

(c) You must keep the records specified in paragraphs (c)(1) through (5) of this section.

(1) As required in § 63.10(b)(2)(xiv), you must keep a copy of each notification that you submitted to comply with this subpart and all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted.

(2) You must keep records to document conformance with the management practices plan required by § 63.11550 as specified in paragraphs (c)(2)(i) and (ii) of this section.

(i) For melting furnaces equipped with a cover or enclosure, records must identify each melting furnace equipped with a cover or enclosure and document that the procedures in the management practices plan were followed during the monthly inspections. These records may be in the form of a checklist.

(ii) Records documenting that you purchased only metal scrap that has been depleted of HAP metals (to the extent practicable) charged to the melting furnace. If you purchase scrap metal specifically for the HAP metal content for use in alloying or to meet specifications for the casting, you must keep records to document that the HAP metal is included in the material specifications for the cast metal product.

(3) You must keep the records of all performance tests, inspections and monitoring data required by §§ 63.11551 and 63.11552, and the information identified in paragraphs (c)(3)(i) through (vi) of this section for each required inspection or monitoring.

(i) The date, place, and time of the monitoring event;

(ii) Person conducting the monitoring;

(iii) Technique or method used;

(iv) Operating conditions during the activity;

(v) Results, including the date, time, and duration of the period from the time the monitoring indicated a problem (e.g., VE) to the time that monitoring indicated proper operation; and

(vi) Maintenance or corrective action taken (if applicable).

(4) If you own or operate a new or existing affected source at a small foundry that is not subject to § 63.11550(b), you must maintain records to document that your facility melts less than 6,000 tpy total of copper, other nonferrous metal, and all associated alloys (excluding aluminum) in each calendar year.

(5) If you use a bag leak detection system, you must keep the records specified in paragraphs (c)(5)(i) through (iii) of this section.

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

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

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

(d) Your records must be in a form suitable and readily available for expeditious review, according to § 63.10(b)(1). As specified in § 63.10(b)(1), you must keep each record for 5 years following the date of each recorded action. For records of annual metal melt production, you must keep the records for 5 years from the end of the calendar year. You must keep each record onsite for at least 2 years after the date of each recorded action according to § 63.10(b)(1). You may keep the records offsite for the remaining 3 years.

(e) If a deviation occurs during a semiannual reporting period, you must submit a compliance report to your permitting authority according to the requirements in paragraphs (e)(1) and (2) of this section.

(1) The first reporting period covers the period beginning on the compliance date specified in § 63.11545 and ending on June 30 or December 31, whichever date comes first after your compliance date. Each subsequent reporting period covers the semiannual period from January 1 through June 30 or from July 1 through December 31. Your 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.

(2) A compliance report must include the information in paragraphs (e)(2)(i) through (iv) of this section.

(i) Company name and address.

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

(iii) Date of the report and beginning and ending dates of the reporting period.

(iv) Identification of the affected source, the pollutant being monitored, applicable requirement, description of deviation, and corrective action taken.

[74 FR 30393, June 25, 2009, as amended at 74 FR 46495, Sept. 10, 2009]

## **Other Requirements and Information**

### **§ 63.11555 What General Provisions apply to this subpart?**

Table 1 to this subpart shows which parts of the General Provisions in §§ 63.1 through 63.16 apply to you.

### **§ 63.11556 What definitions apply to this subpart?**

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

*Aluminum foundry* means a facility that melts aluminum and pours molten aluminum into molds to manufacture aluminum castings (except die casting) that are complex shapes. For purposes of this subpart, this definition does not include primary or secondary metal producers that cast molten aluminum to produce simple shapes such as sows, ingots, bars, rods, or billets.

*Aluminum foundry HAP* means any compound of the following metals: beryllium, cadmium, lead, manganese, or nickel, or any of these metals in the elemental form.

*Annual copper and other nonferrous foundry metal melt capacity* means, for new affected sources, the lower of the copper and other nonferrous metal melting operation capacity, assuming 8,760 operating hours per year or, if applicable, the maximum permitted copper and other nonferrous metal melting operation production rate for the melting operation calculated on an annual basis. Unless otherwise specified in the permit, permitted copper and other nonferrous metal melting operation rates that are not specified on an annual basis must be annualized assuming 24 hours per day, 365 days per year of operation. If the permit limits the operating hours of the melting operation(s) or foundry, then the permitted operating hours are used to annualize the maximum permitted copper and other nonferrous metal melt production rate. The annual copper and other nonferrous metal melt capacity does not include the melt capacity for ferrous metal melted in iron or steel foundry melting operations that are co-located with copper or other nonferrous melting operations or the nonferrous metal melted in non-foundry melting operations.

*Annual copper and other nonferrous foundry metal melt production* means, for existing affected sources, the quantity of copper and other nonferrous metal melted in melting operations at the foundry in a given calendar year. For the purposes of this subpart, metal melt production is determined on the basis of the quantity of metal charged to the melting operations. The annual copper and nonferrous metal melt production does not include the melt production of ferrous metal melted in iron or steel foundry melting operations that are co-located with copper and other nonferrous melting operations or the nonferrous metal melted in non-foundry melting operations.

*Annual metal melt capacity*, for new affected sources, means the lower of the aluminum, copper, and other nonferrous metal melting operation capacity, assuming 8,760 operating hours per year or, if applicable, the maximum permitted aluminum, copper, and other nonferrous metal melting operation production rate for the melting operation calculated on an annual basis. Unless otherwise specified in the permit, permitted aluminum, copper, and other nonferrous metal melting operation rates that are not specified on an annual basis must be annualized assuming 24 hours per day, 365 days per year of operation. If the permit limits the operating hours of the melting operation(s) or foundry, then the permitted operating hours are used to annualize the maximum permitted aluminum, copper, and other nonferrous metal melt production rate. The annual metal melt capacity does not include the melt capacity for ferrous metal melted in iron or steel foundry melting operations that are co-located with aluminum, copper, or other nonferrous melting operations or the nonferrous metal melted in non-foundry melting operations.

*Annual metal melt production* means, for existing affected sources, the quantity of aluminum, copper, and other nonferrous metal melted in melting operations at the foundry in a given calendar year. For the purposes of this subpart, annual metal melt production is determined on the basis of the quantity of metal charged to the melting operations. The annual metal melt production does not include the melt production of ferrous metal melted in iron or steel foundry melting operations that are co-located with aluminum, copper, or other nonferrous melting operations or the nonferrous metal melted in non-foundry melting operations.

*Bag leak detection system* means a system that is capable of continuously monitoring relative PM ( *i.e.*, 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, light scattering, light transmittance, or other effect to continuously monitor relative PM loadings.

*Copper foundry* means a foundry that melts copper or copper-based alloys and pours molten copper or copper-based alloys into molds to manufacture copper or copper-based alloy castings (excluding die casting) that are complex shapes. For purposes of this subpart, this definition does not include primary or secondary metal producers that cast molten copper to produce simple shapes such as sows, ingots, billets, bars, anode copper, rods, or copper cake.

*Copper foundry HAP* means any compound of any of the following metals: lead, manganese, or nickel, or any of these metals in the elemental form.

*Deviation* means any instance where 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 emissions limitation 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 emissions limitation in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.

*Die casting* means operations classified under the North American Industry Classification System codes 331521 (Aluminum Die-Casting Foundries) and 331522 (Nonferrous (except Aluminum) Die-Casting Foundries) and comprises establishments primarily engaged in introducing molten aluminum, copper, and other nonferrous metal, under high pressure, into molds or dies to make die-castings.

*Large foundry* means, for an existing affected source, a copper or other nonferrous foundry with an annual metal melt production of copper, other nonferrous metals, and all associated alloys (excluding aluminum) of 6,000 tons or greater. For a new affected source, *large foundry* means a copper or other nonferrous foundry with an annual metal melt capacity of copper, other nonferrous metals, and all associated alloys (excluding aluminum) of 6,000 tons or greater.

*Material containing aluminum foundry HAP* means a material containing one or more aluminum foundry HAP. Any material that contains beryllium, cadmium, lead, or nickel in amounts greater than or equal to 0.1 percent by weight (as the metal), or contains manganese in amounts greater than or equal to 1.0 percent by weight (as the metal), as shown in formulation data provided by the manufacturer or supplier, such as the Material Safety Data Sheet for the material, is considered to be a material containing aluminum foundry HAP.

*Material containing copper foundry HAP* means a material containing one or more copper foundry HAP. Any material that contains lead or nickel in amounts greater than or equal to 0.1 percent by weight (as the metal), or contains manganese in amounts greater than or equal to 1.0 percent by weight (as the metal), as shown in formulation data provided by the manufacturer or supplier, such as the Material Safety Data Sheet for the material, is considered to be a material containing copper foundry HAP.

*Material containing other nonferrous foundry HAP* means a material containing one or more other nonferrous foundry HAP. Any material that contains chromium, lead, or nickel in amounts greater than or equal to 0.1 percent by weight (as the metal), as shown in formulation data provided by the manufacturer or supplier, such as the Material Safety Data Sheet for the material, is considered to be a material containing other nonferrous foundry HAP.

*Melting operations* (the affected source) means the collection of furnaces ( e.g., induction, reverberatory, crucible, tower, dry hearth) used to melt metal ingot, alloyed ingot and/or metal scrap to produce molten metal that is poured into molds to make castings. Melting operations dedicated to melting ferrous metal at an iron and steel foundry are not included in this definition and are not part of the affected source.

*Other nonferrous foundry* means a facility that melts nonferrous metals other than aluminum, copper, or copper-based alloys and pours the nonferrous metals into molds to manufacture nonferrous metal castings (excluding die casting) that are complex shapes. For purposes of this subpart, this definition does not include primary or secondary metal producers that cast molten nonferrous metals to produce simple shapes such as sows, ingots, bars, rods, or billets.

*Other nonferrous foundry HAP* means any compound of the following metals: chromium, lead, and nickel, or any of these metals in the elemental form.

*Small foundry* means, for an existing affected source, a copper or other nonferrous foundry with an annual metal melt production of copper, other nonferrous metals, and all associated alloys (excluding aluminum) of less than 6,000 tons. For a new affected source, *small foundry* means a copper or other nonferrous foundry with an annual metal melt capacity of copper, other nonferrous metals, and all associated alloys (excluding aluminum) of less than 6,000 tons.

**§ 63.11557 Who implements and enforces this subpart?**

(a) This subpart can be implemented and enforced by the U.S. 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 has the authority to implement and enforce this subpart. You should contact your U.S. EPA Regional Office to find out if 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 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 applicability requirements in § 63.11544, the compliance date requirements in § 63.11545, and the applicable standards in § 63.11550.

(2) Approval of an alternative nonopacity emissions standard under § 63.6(g).

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

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

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

**§ 63.11558 [Reserved]**

**Table 1 to Subpart ZZZZZZ of Part 63—Applicability of General Provisions to Aluminum, Copper, and Other Nonferrous Foundries Area Sources**

As required in § 63.11555, “What General Provisions apply to this subpart?,” you must comply with each requirement in the following table that applies to you.

<b>Citation</b>	<b>Subject</b>	<b>Applies to subpart ZZZZZZ?</b>	<b>Explanation</b>
§ 63.1(a)(1), (a)(2), (a)(3), (a)(4), (a)(6), (a)(10)-(a)(12), (b)(1), (b)(3), (c)(1), (c)(2), (c)(5), (e)	Applicability	Yes	§ 63.11544(f) exempts affected sources from the obligation to obtain a title V operating permit.
§ 63.1(a)(5), (a)(7)-(a)(9), (b)(2), (c)(3), (c)(4), (d)	Reserved	No	
§ 63.2	Definitions	Yes	
§ 63.3	Units and Abbreviations	Yes	
§ 63.4	Prohibited Activities and Circumvention	Yes	
§ 63.5	Preconstruction Review and Notification Requirements	Yes	
§ 63.6(a), (b)(1)-(b)(5), (b)(7), (c)(1), (c)(2), (c)(5), (e)(1), (e)(3)(i), (e)(3)(iii)-(e)(3)(ix), (f)(2), (f)(3), (g), (i), (j)	Compliance with Standards and Maintenance Requirements	Yes	
§ 63.6(f)(1)	Compliance with Nonopacity Emission Standards	No	Subpart ZZZZZZ requires continuous compliance with all requirements in this subpart.
§ 63.6(h)(1), (h)(2), (h)(5)-(h)(9)	Compliance with Opacity and Visible Emission Limits	No	Subpart ZZZZZZ does not contain opacity or visible emission limits.
§ 63.6(b)(6), (c)(3), (c)(4), (d), (e)(2), (e)(3)(ii), (h)(3), (h)(5)(iv)	Reserved	No	
§ 63.7	Applicability and Performance Test Dates	Yes	
§ 63.8(a)(1), (b)(1), (f)(1)-(5), (g)	Monitoring Requirements	Yes	
§ 63.8(a)(2), (a)(4), (b)(2)-(3), (c), (d), (e), (f)(6), (g)	Continuous Monitoring Systems	No	Subpart ZZZZZZ does not require a flare or CPMS, COMS or CEMS.
§ 63.8(a)(3)	[Reserved]	No	

Citation	Subject	Applies to subpart ZZZZZZ?	Explanation
§ 63.9(a), (b)(1), (b)(2)(i)-(iii), (b)(5), (c), (d), (e), (h)(1)-(h)(3), (h)(5), (h)(6), (j)	Notification Requirements	Yes	Subpart ZZZZZZ requires submission of Notification of Compliance Status within 120 days of compliance date unless a performance test is required.
§ 63.9(b)(2)(iv)-(v), (b)(4), (f), (g), (i)	No		
§ 63.9(b)(3), (h)(4)	Reserved	No	
§ 63.10(a), (b)(1), (b)(2)(i)-(v), (vii), (vii)(C), (viii), (ix), (b)(3), (d)(1)-(2), (d)(4), (d)(5), (f)	Recordkeeping and Reporting Requirements	Yes	
§ 63.10(b)(2)(vi), (b)(2)(vii)(A)-(B), (c), (d)(3), (e)	No	Subpart ZZZZZZ does not require a CPMS, COMS, CEMS, or opacity or visible emissions limit.	
§ 63.10(c)(2)-(c)(4), (c)(9)	Reserved	No	
§ 63.11	Control Device Requirements	No	
§ 63.12	State Authority and Delegations	Yes	
§§ 63.13-63.16	Addresses, Incorporations by Reference, Availability of Information, Performance Track Provisions	Yes	

**Indiana Department of Environmental Management  
Office of Air Quality**

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

**Source Description and Location**

Source Name:	Ford Meter Box Company, Inc.
Source Location:	775 Manchester Drive, Wabash, Indiana 46992-1420
County:	Wabash County
SIC Code:	3366, 3362
Operation Permit No.:	T 169-25077-00003
Operation Permit Issuance Date:	December 8, 2009
Significant Source Modification No.:	169-32985-00003
Significant Permit Modification No.:	169-33227-00003
Permit Reviewer:	David Matousek

**Existing Approvals**

The source was issued Part 70 Operating Permit No. T 169-25077-00003 on December 8, 2009. The source has since received the following approvals:

- (a) First Administrative Amendment No. 169-31626-00003, issued on April 5, 2012.

**County Attainment Status**

The source is located in Wabash County.

Pollutant	Designation
SO <sub>2</sub>	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O <sub>3</sub>	Unclassifiable or attainment effective June 15, 2004, for the 8-hour ozone standard. <sup>1</sup>
PM <sub>10</sub>	Unclassifiable effective November 15, 1990.
NO <sub>2</sub>	Cannot be classified or better than national standards.
Pb	Not designated.

<sup>1</sup>Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005.

Unclassifiable or attainment effective April 5, 2005 for PM2.5.

- (a) Ozone Standards

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

(b) PM<sub>2.5</sub>

Wabash County has been classified as attainment for PM<sub>2.5</sub>. On May 8, 2008, U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for PM<sub>2.5</sub> emissions. These rules became effective on July 15, 2008. On May 4, 2011, the air pollution control board issued an emergency rule establishing the direct PM<sub>2.5</sub> significant level at ten (10) tons per year. This rule became effective, June 28, 2011. Therefore, direct PM<sub>2.5</sub>, SO<sub>2</sub>, and NO<sub>x</sub> emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability – Entire Source section.

(c) Other Criteria Pollutants

Wabash County has been classified as attainment or unclassifiable in Indiana for PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, CO, and Lead. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

**Fugitive Emissions**

Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7, and there is no applicable New Source Performance Standard that was in effect on August 7, 1980, fugitive emissions are not counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability. IDEM, OAQ determined, during the initial Part 70 Operating Permit application review, that Ford Meter Box Company is not a secondary metal production facility (not one of 28 source categories) because the plant does not use scrap metal.

**Source Status**

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

Pollutant	Emissions (ton/yr)
PM	176.02
PM <sub>10</sub>	175.98
PM <sub>2.5</sub>	175.98
SO <sub>2</sub>	1.67
VOC	98.72
CO	231.62
NO <sub>x</sub>	44.04
GHGs as CO <sub>2</sub> e	20,170
HAPs	
Lead	8.13
Other Minor	16.22
<b>Total</b>	<b>24.35</b>

- (a) This existing source is not a major stationary source, under PSD (326 IAC 2-2), because no regulated pollutant, excluding GHGs, is emitted at a rate of two hundred fifty (250) tons per year or more, emissions of GHGs are less than one hundred thousand (100,000) tons of CO<sub>2</sub> equivalent emissions (CO<sub>2</sub>e) per year, and it is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(ff)(1).
- (b) This existing source is not a major source of HAPs, as defined in 40 CFR 63.2, because HAPs emissions are less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA).

### Description of Proposed Modification

The Office of Air Quality (OAQ) has reviewed a modification application, submitted by Ford Meter Box Company, Inc. on March 21, 2013. Ford Meter Box Company, Inc. applied to install and operate a Didion rotary metal reclaimer and two additional machining centers in the operation identified as Unit #26. Ford Meter Box Company, Inc. also applied to revise the uncontrolled emission factors used to estimate emissions from grinding and cut-off operations identified as Unit #5 and #15, to reflect recent emissions testing, and to add the applicable portions of 40 CFR 63, Subpart ZZZZ to include one existing natural gas-fired emergency generator, two existing diesel emergency generators and an existing fire pump.

The following is a list of modified emission units:

- (e) One (1) Iron Room for cast iron grinding, boring, and tapping operations, identified as Unit #5, constructed in 1973 and approved for modification in 2013, with a maximum throughput of 0.78 tons per hour, using portable fabric filters as control, exhausting inside the building.
- (m) Various machining, grinding, and polishing operations, identified as Unit #26, constructed in 1999 and approved for modification in 2013, with a maximum throughput of 2.238 tons per hour, using Baghouse "BC" for capturing brass chips to be recycled as well as for controlling dust emissions, exhausting to Stack "BC." The exhaust gas is vented through a drop box to reduce particulate loading and then to the baghouse;

The following is a new emission unit:

- (u) One (1) Didion rotary metal reclaimer, approved for construction in 2013, with a maximum throughput of 2.00 tons of metal per hour, using Baghouse "G" for particulate emissions control, exhausting to Stack "G."

### Enforcement Issues

There are no pending enforcement actions.

### Stack Summary

Stack ID	Operation	Height (ft)	Diameter (ft)	Flow Rate (acfm)	Temperature (°F)
"G"	Didion rotary metal reclaimer	13.00	2.23	9,750	70

### Emission Calculations

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

### Permit Level Determination – Part 70

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

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

<b>Total PTE Increase due to the Modification</b>			
<b>Pollutant</b>	<b>PTE New Emission Units (ton/yr)</b>	<b>Net Increase to PTE of Modified Emission Units (ton/yr)</b>	<b>Total PTE for New and Modified Units (ton/yr)</b>
PM	28.03	7.97	36.00
PM <sub>10</sub>	19.62	0.08	20.42
PM <sub>2.5</sub>	19.62	0.08	20.42
SO <sub>2</sub>	0.00	0.00	0.00
VOC	10.51	0.00	10.51
CO	0.00	0.00	0.00
NO <sub>x</sub>	0.00	0.00	0.00
HAPs	0.06	0.39	0.45

This source modification is subject to 326 IAC 2-7-10.5(g)(4); because, the modification includes a potential to emit greater than or equal to twenty-five tons per year of PM. 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, the modification includes the incorporation of a case-by-case emission limitation.

**Permit Level Determination – PSD**

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

<b>Process</b>	<b>Potential to Emit (ton/year)</b>								
	<b>PM</b>	<b>PM<sub>10</sub></b>	<b>*PM<sub>2.5</sub></b>	<b>SO<sub>2</sub></b>	<b>VOC</b>	<b>CO</b>	<b>NO<sub>x</sub></b>	<b>GHGs</b>	<b>Lead</b>
Didion Rotary Metal Reclaimer	28.03	19.62	19.62	0.00	10.51	0.00	0.00	0.00	0.06
Modified Unit #26	7.97	0.80	0.80	0.00	0.00	0.00	0.00	0.00	0.39
<b>Total for Modification</b>	<b>36.00</b>	<b>20.42</b>	<b>20.42</b>	<b>0.00</b>	<b>10.51</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.45</b>
Total for Source Before Modification	178.47	175.98	175.98	1.67	98.72	231.62	44.04	20,170	8.19
Total for Source After Modification	214.47	196.40	196.40	1.67	98.72	231.62	44.04	20,170	8.64
<b>PSD Major Source Thresholds</b>	<b>250</b>	<b>250</b>	<b>250</b>	<b>250</b>	<b>250</b>	<b>250</b>	<b>250</b>	<b>100,000</b>	<b>10</b>

\*PM<sub>2.5</sub> listed is direct PM<sub>2.5</sub>.

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

Ford Meter Box Company began operation in 1971. Therefore, emission units existing as of August 1977 were not subject to PSD BACT analysis. IDEM, OAQ determined, during the initial Part 70 Operating Permit application review, that Ford Meter Box Company is not a secondary metal production facility (not one of 28 source categories) because the plant does not use scrap metal.

The uncontrolled/unlimited potential to emit PM, PM<sub>10</sub>, PM<sub>2.5</sub>, and lead are in excess of the PSD major source thresholds; therefore, Ford Meter Box Company, Inc. has accepted the following PSD minor limits:

**PM, PM<sub>10</sub> and PM<sub>2.5</sub>**

PM, PM<sub>10</sub> and PM<sub>2.5</sub> emissions from the Didion Rotary Metal Reclaimer, Units #5, #6, #11- #18, #20, #23, #26, #29, and #30 shall not exceed the emissions limits listed in the table below:

Emission Unit	PM Emission Limit (lb/hr)	PM <sub>10</sub> Emission Limit (lb/hr)	PM <sub>2.5</sub> Emission Limit (lb/hr)
Unit #23: Furnace Charging, Melting and Pouring	5.71	5.71	5.71
Unit #6: #1 Handline and Harrison Sand Tanks and Shakeout and Conveyor Operations for #1 Handline, #1 Harrison, #2 Harrison, #4 Sinto Mold Lines	3.42	3.42	3.42
Unit #20: Shakeout and Sand Handling for #1, #2, #3 Sintos	3.42	3.42	3.42
Unit #13: Sand Treatment and Brass Reclaim Operations	2.28	2.28	2.28
Didion Rotary Metal Reclaimer	1.14	1.14	1.14
Unit #11: Shot Blasting	1.14	1.14	1.14
Unit #12: Shot Blasting	0.46	0.46	0.46
Unit #14: Shot Blasting	3.42	3.42	3.42
Unit #15: Grinding and Cut-Off	3.42	3.42	3.42
Unit #16: Machining, Grinding, and Polishing	0.68	0.68	0.68
Unit #17: Machining, Grinding, and Polishing	2.28	2.28	2.28
Unit #18: Machining, Grinding, and Polishing	0.68	0.68	0.68
Unit #26: Machining, Grinding, and Polishing	2.28	2.28	2.28
Unit #29: Shot blast machine	1.14	1.14	1.14
Unit #30: Cut-off saw	1.14	1.14	1.14

Compliance with the above limits, combined with a requirement to use only clean charge, customer returns and internal scrap, along with the potential to emit PM, PM<sub>10</sub> and PM<sub>2.5</sub> from all other emission units at this source, will ensure PM, PM<sub>10</sub> and PM<sub>2.5</sub> emissions from the entire source will be less than two hundred and fifty (250) tons per twelve consecutive month period and will render the requirements of 326 IAC 2-2 not applicable.

**Lead**

Lead emissions from the Didion Rotary Metal Reclaimer, Units #5, #6, #11- #18, #20, #23, #26, #29, and #30 shall not exceed the emissions limits listed in the table below:

Emission Unit	Lead Emission Limit (lb/hr)
Unit #23: Furnace Charging, Melting and Pouring	0.548
Unit #6: #1 Handline and Harrison Sand Tanks and Shakeout and Conveyor Operations for #1 Handline, #1 Harrison, #2 Harrison, #4 Sinto Mold Lines	0.034
Unit #20: Shakeout and Sand Handling for #1, #2, #3 Sintos	0.034
Unit #13: Sand Treatment and Brass Reclaim Operations	0.009
Didion Rotary Metal Reclaimer	0.012
Unit #11: Shot Blasting	0.119
Unit #12: Shot Blasting	0.059
Unit #14: Shot Blasting	0.018
Unit #15: Grinding and Cut-Off	0.342
Unit #16: Machining, Grinding, and Polishing	0.056
Unit #17: Machining, Grinding, and Polishing	0.306
Unit #18: Machining, Grinding, and Polishing	0.064
Unit #26: Machining, Grinding, and Polishing	0.306
Unit #29: Shot blast machine	0.023
Unit #30: Cut-off saw	0.023

Compliance with the above limits, combined with the potential to emit HAP from other emission units at this source, shall limit lead emissions from the entire source to less than ten (10) tons per twelve (12) consecutive month period and total HAP emissions from the entire source to less than twenty-five (25) tons per twelve (12) consecutive month period and will render the requirements of 326 IAC 2-2 (PSD) not applicable. Compliance with these limits will also render the requirements of 326 IAC 2-4.1 (Major Source of Hazardous Air Pollutants) not applicable.

### Federal Rule Applicability Determination

The following federal rules are applicable to the source due to this modification:

#### **NSPS:**

- (a) The requirements of the New Source Performance Standard for Secondary Brass and Bronze Production Plants, 40 CFR 60, Subpart M are not included in the permit because this subpart does not apply to foundry furnaces from which molten brass or bronze are cast into the shape of finished products.
- (b) The requirements of the New Source Performance Standard for Calciners and Dryers in Mineral Industries, 40 CFR 60, Subpart UUU are not included in the permit because Ford Meter Box does not use calciners or dryers as defined in 40 CFR 60.731 to remove water from the mold or core sand.
- (c) The requirements of the Standards of Performance for New Stationary Sources, 40 CFR 60, Subpart OOO – Standards of Performance for Nonmetallic Mineral Processing Plants are not included in the permit because Ford Meter Box does not operate a crusher or grinding mill.
- (d) The requirements of the Standards of Performance for New Stationary Sources, 40 CFR 60, Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines are not included in the permit. The two diesel fired 423 HP emergency generators and the fire pump were constructed prior to July 11, 2005.
- (e) The requirements of the Standards of Performance for New Stationary Sources, 40 CFR 60, Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines are not included in the permit because the 100 KW (134 HP) spark ignition natural gas-fired emergency generator because it was manufactured prior to July 1, 2008. It was manufactured on December 14, 2007.

#### **NESHAP:**

- (f) The 100 HP diesel-fired emergency fire pump and both 423 HP diesel-fired emergency generators are subject to the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines 40 CFR 63.6580, Subpart ZZZZ, which is incorporated by reference as 326 IAC 20-82. The units subject to this rule include the following:
  - (1) Two (2) diesel fuel-fired 423 maximum horsepower (2.9 million British thermal Units per hour) emergency generators, installed in 1992.  
[40 CFR 63, Subpart ZZZZ]
  - (2) One (1) 100 HP four-stroke rich burn diesel-fired emergency fire pump, installed in January of 1980, using no control and exhausting to the atmosphere.  
[40 CFR 63, Subpart ZZZZ]

Nonapplicable portions of the NESHAP will not be included in the permit. The 100 HP diesel-fired emergency fire pump and both 423 HP diesel-fired emergency generators are subject to the following portions of Subpart ZZZZ:

- (1) 40 CFR 63.6580;
- (2) 40 CFR 63.6585
- (3) 40 CFR 63.6590(a)(1)(iii);
- (4) 40 CFR 63.6595(a)(1) (b), (c);
- (5) 40 CFR 63.6603(a);
- (6) 40 CFR 63.6605;
- (7) 40 CFR 63.6625(e)(3), (f), (h), (i), (j);
- (8) 40 CFR 63.6635;

- (9) 40 CFR 63.6640(a), (b), (e), (f)(1), (f)(2), (f)(4);
- (10) 40 CFR 63.6655(d), (e)(2), (e)(3);
- (11) 40 CFR 63.6650;
- (12) 40 CFR 63.6655;
- (13) 40 CFR 63.6660;
- (14) 40 CFR 63.6665;
- (15) 40 CFR 63.6670;
- (16) 40 CFR 63.6675;
- (17) Table 2d (items 4); and
- (18) Table 6 (item 9)
- (19) Table 8

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 ZZZZ.

- (g) The 100 KW natural gas-fired emergency generator is subject the requirements of the 40 CFR 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (326 IAC 20-82), because it is considered a new (construction commenced on or after June 12, 2006) stationary reciprocating internal combustion engine (RICE) at an area source of hazardous air pollutants (HAP). The unit subject to this rule includes the following:
- (1) One (1) 100 KW spark ignition internal combustion natural gas-fired emergency generator, constructed in 2007, used to generate electric power, with a maximum power output rate of 134.1 horsepower, firing natural gas only, using no control and exhausting to the atmosphere. [40 CFR 63, Subpart ZZZZ]

Nonapplicable portions of the NESHAP will not be included in the permit. The 100 KW natural gas-fired emergency generator is subject to the following portions of Subpart ZZZZ:

- (1) 40 CFR 63.6580
- (2) 40 CFR 63.6585
- (3) 40 CFR 63.6590(a)(2)(iii) and (c)(1)
- (4) 40 CFR 63.6665
- (5) 40 CFR 63.6670
- (6) 40 CFR 63.6675

Pursuant to 40 CFR 63.6665, the 100 KW natural gas-fired emergency generator does not have to meet the requirements of 40 CRF 63, Subpart A (General Provisions), since it is considered a new stationary RICE located at an area source of HAP emissions.

- (h) The requirements of the National Emission Standards for Hazardous Air Pollutants for Source Categories (Continued), 40 CFR 63, Subpart TTTTTT are not included in the permit because this source does not meet the definition of a secondary nonferrous metals processing facility, pursuant to 40 CFR 63.11472.
- (i) The requirements of the National Emission Standards for Hazardous Air Pollutants for Source Categories (Continued), 40 CFR 63, Subpart XXXXXX – National Emission Standards for Hazardous Air Pollutants Area Source Standards for Nine Metal Fabrication and Finishing Source Categories are not included in the permit because the operations at this source do not involve the fabrication and finishing of the following:
- (1) Electrical and Electronic Equipment
  - (2) Fabricated Metal Products
  - (3) Fabricated Plate Work (Boiler Shops)
  - (4) Fabricated Structural Metal Manufacturing
  - (5) Heating Equipment, except electric

- (6) Industrial Machinery and Equipment
  - (7) Iron and Steel Forging
  - (8) Primary Metals Production
  - (9) Valve and Pipe Fittings
- (j) The source remains subject to 40 CFR 63, Subpart ZZZZZZ, Area Source Standards for Aluminum, Copper, and Other Nonferrous Foundries. The requirements are already incorporated into the permit.
- (k) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to new or modified emission units that involve a pollutant-specific emission unit and meet the following criteria:
- (1) has a potential to emit before controls equal to or greater than the Part 70 major source threshold for the pollutant involved;
  - (2) is subject to an emission limitation or standard for that pollutant; and
  - (3) uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.

The 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:

<b>CAM Applicability Analysis – PM, PM<sub>10</sub> and PM<sub>2.5</sub></b>							
<b>Emission Unit</b>	<b>Control Device Used</b>	<b>Emission Limitation (Y/N)</b>	<b>Uncontrolled PTE (ton/yr)</b>	<b>Controlled PTE (ton/yr)</b>	<b>Part 70 Major Source Threshold (ton/yr)</b>	<b>CAM Applicable (Y/N)</b>	<b>Large Unit (Y/N)</b>
Didion Rotary Metal Reclaimer	Y	Y	PM - 28.03 PM10 - 19.62 PM2.5 - 19.62	PM - 4.99 PM10 - 4.99 PM2.5 - 4.99	100	N	N
Unit #26 Machining, Grinding and Polish	Y	Y	PM - 166.64 PM10 - 16.67 PM2.5 - 16.67	PM - 9.99 PM10 - 9.99 PM2.5 - 9.99	100	Y - PM N - PM <sub>10/2.5</sub>	N

<b>CAM Applicability Analysis – Lead</b>							
<b>Emission Unit</b>	<b>Control Device Used</b>	<b>Emission Limitation (Y/N)</b>	<b>Uncontrolled PTE (ton/yr)</b>	<b>Controlled PTE (ton/yr)</b>	<b>Part 70 Major Source Threshold (ton/yr)</b>	<b>CAM Applicable (Y/N)</b>	<b>Large Unit (Y/N)</b>
Didion Rotary Metal Reclaimer	Y	Y	0.06	0.05	100	N	N
Unit #26 Machining, Grinding and Polish	Y	Y	8.23	1.34	100	N	N

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are applicable to the Machining, Grinding and Polishing process, identified as Unit #26, for PM upon issuance of the Title V Renewal. A CAM plan must be submitted as part of the Renewal application.

### State Rule Applicability Determination – Entire Source

The following state rules are applicable to the source due to the modification:

#### **326 IAC 2-2 and 2-3 (PSD and Emission Offset)**

PSD and Emission Offset applicability is discussed under the Permit Level Determination – PSD and Emission Offset section.

#### **326 IAC 1-5-2 (Emergency Reduction Plans)**

This source is still subject to 326 IAC 1-5-2.

#### **326 IAC 1-6-3 (Preventive Maintenance Plan)**

This source is still subject to 326 IAC 1-6-3.

#### **326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))**

Operation of the Didion Rotary Metal Reclaimer and modified Unit #26 will each emit less than ten (10) tons per year for a single HAP and less than twenty-five (25) tons per year for a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

#### **326 IAC 5-1**

This source is still subject to 326 IAC 5-1

### State Rule Applicability Determination – Individual Facilities

#### **Didion Rotary Metal Reclaimer**

#### **326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)**

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the Didion Rotary Metal Reclaimer shall not exceed 6.52 pounds per hour when operating at a process weight rate of 2.00 tons per hour. The pound per hour limitation was calculated with the following equation:

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

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

The Didion Rotary Metal Reclaimer can comply with the 326 IAC 6-3-2 limit without control. However, the control device is required for compliance with the 326 IAC 2-2 limit. Therefore, the baghouse controlling emissions from the Didion Rotary Metal Reclaimer shall be in operation at all times in order to comply with the 326 IAC 2-2 limit.

#### **326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants)**

In order to limit the potential to emit of the source to less than ten (10) tons per year of a single HAP and twenty-five tons per year for total HAPs, lead emissions from the Didion Rotary Metal Reclaimer shall not exceed 0.012 lb/hr. This limit along with other limits, and the potential to emit of other emission units at the site, will ensure the requirements of 326 IAC 2-4.1 do not apply.

#### **Unit #26 (Machining, Grinding and Polishing)**

#### **326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)**

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from Unit #26 (Machining, Grinding and Polishing) shall not exceed 7.03 pounds per hour when operating at a process weight rate of 2.238 tons per hour. The pound per hour limitation was calculated with the following equation:

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

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

The baghouse controlling emissions from Unit #26 (Machining, Grinding and Polishing) shall be in operation at all times in order to comply with the 326 IAC 6-3-2 limit.

**326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants)**

In order to limit the potential to emit of the source to less than ten (10) tons per year of a single HAP and twenty-five tons per year for total HAPs, lead emissions from Unit #26 (Machining, Grinding and Polishing) shall not exceed 0.306 lb/hr. This limit along with other limits, and the potential to emit of other emission units at the site, will ensure the requirements of 326 IAC 2-4.1 do not apply.

**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 Compliance Determination Requirements applicable to this modification are as follows:

Emission Unit	Parameter	Frequency
Didion Rotary Metal Reclaimer	Use of Control Device	At all times the unit is in operation.
Units #5, #6, #11 to #18, #20, #23, #26, #29, and #30	Use of Control Device	At all times the unit is in operation.
Powder Coating Booth	Use of Control Device	At all times the unit is in operation.

<b>Summary of Testing Requirements</b>				
<b>Emission Unit</b>	<b>Control Device</b>	<b>Timeframe for Testing</b>	<b>Pollutant</b>	<b>Frequency of Testing</b>
Unit #23	Baghouse	Within 5 years of last valid compliant test for PM, PM <sub>10</sub> and Lead	PM, PM <sub>10</sub> , PM <sub>2.5</sub> , Lead	Every 5 Years
Group A Units	Baghouse	Within 5 years of last valid compliant test for PM, PM <sub>10</sub> and Lead	PM, PM <sub>10</sub> , PM <sub>2.5</sub> , Lead	One Every 5 Years
Group B Units	Baghouse or cartridge filter	Within 5 years of last valid compliant test for PM, PM <sub>10</sub> and Lead	PM, PM <sub>10</sub> , PM <sub>2.5</sub> , Lead	One Every 5 Years
Group C Units	Baghouse or cartridge filter	Within 5 years of last valid compliant test for PM, PM <sub>10</sub> and Lead	PM, PM <sub>10</sub> , PM <sub>2.5</sub> , Lead	One Every 5 Years
Didion Rotary Metal Reclaimer	Baghouse	Within 60 days of max capacity, but no later than 180 days after startup	PM, PM <sub>10</sub> , PM <sub>2.5</sub> , Lead	Every 5 Years

The Compliance Monitoring Requirements applicable to this modification are as follows:

<b>Summary of Monitoring Requirements</b>			
<b>Emission Unit</b>	<b>Parameter</b>	<b>Frequency</b>	<b>Response</b>
Didion Rotary Metal Reclaimer / Baghouse G	Pressure Drop, VE Notations or Bag Leak Detector	Once per Day or Continuous	A Reasonable Response
Unit #26 / Baghouse BC	Pressure Drop, VE Notations or Bag Leak Detector	Once per Day or Continuous	A Reasonable Response

These monitoring conditions are necessary because the baghouses for the Didion Rotary Metal Reclaimer and Unit #26 (Machining, Grinding and Polishing) must work correctly to ensure compliance with 326 IAC 6-3-2, 326 IAC 2-2 and 326 2.4-1.

## Proposed Changes

The changes listed below have been made to Part 70 Operating Permit No. T169-25077-00003. Deleted language appears as ~~strikethroughs~~ and new language appears in **bold**:

### Modification No. 1:

#### Emission Unit Description Revisions

IDEM, OAQ is adding the emission unit description of the Didion Rotary Metal Reclaimer, and is updating the emission unit descriptions for the emergency fire water pump, emergency generators, the Iron Room (Unit #5), and machining, grinding and polishing (Unit #26). Applicable rules have been added to specifically regulated insignificant activities and emission units, and updated as needed. The updated emission unit descriptions are shown below:

A.1 General Information [326 IAC 2-7-4(c)][326 IAC 2-7-5(145)][326 IAC 2-7-1(22)]

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A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)]  
[326 IAC 2-7-5(145)]

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

#### Charging, Melting, and Pouring/Cooling:

- (a) Unit #23, consisting of:

\*\*\*\*\*

Due to power supply limitations the box induction furnace and crucible induction furnace cannot operate simultaneously. The total maximum melt capacity is 8.195 tons per hour. Metallic fume emissions from melting and pouring, including transfer points, controlled by nine (9) baghouse modules, identified as "UU" with a common inlet but nine (9) individual stack discharges. **[40 CFR 63, Subpart ZZZZZZ]**

\*\*\*\*\*

#### Machining, Grinding, and Finishing:

- (e) One (1) Iron Room **for cast iron grinding, boring, and tapping operations**, identified as Unit #5, constructed in 1973 **and approved for modification in 2013**, ~~for cast iron grinding, boring and tapping operations~~, with a maximum throughput of 0.78 tons per hour, using **portable fabric filters as control, exhausting inside the building** ~~Baghouse "G" for particulate emissions control~~;

\*\*\*\*\*

- (m) Various machining, grinding, and polishing operations, identified as Unit #26, constructed in 1999 **and approved for modification in 2013**, with a maximum throughput of ~~2.132.238~~ **2.238** tons per hour, using Baghouse "BC" for capturing brass chips to be recycled as well as for controlling dust emissions. The exhaust gas is vented through a drop box to reduce particulate loading and then to the baghouse;

\*\*\*\*\*

**Combustion Units:**

- (p) One (1) 100 KW spark ignition internal combustion natural gas-fired **emergency** generator, constructed in 2007, used to generate electric power, with a maximum power output rate of 134.1 horsepower, firing natural gas only, using no control and exhausting to the atmosphere; **[40 CFR 63, Subpart ZZZZ]** and
- (q) Two (2) diesel fuel-fired 423 maximum horsepower (2.9 million British thermal Units per hour) **emergency** generators, installed in 1992. **[40 CFR 63, Subpart ZZZZ]**

**Reclamation Unit:**

- (u) **One (1) Didion rotary metal reclaimer, approved for construction in 2013, with a maximum throughput of 2.00 tons of metal per hour, using Baghouse "G" for particulate emissions control, exhausting to Stack "G."**

\*\*\*\*\*

A.3 Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-7-4(c)]  
[326 IAC 2-7-5(145)]

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

\*\*\*\*\*

- (d) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million British Thermal Units per hour, including, but not limited to:

Two (2) natural gas fired boilers for building heating, identified as Units #1 and #2, installed in 2009, each with a maximum heat input capacity of 7.325 MMBtu/hr, and exhausting to Stack "A"; **[326 IAC 6-2-4]**

\*\*\*\*\*

- (x) Paved and unpaved roads and parking lots with public access; **[326 IAC 6-4]**

\*\*\*\*\*

- (bb) ~~Stationary fire pumps;~~ **One (1) 100 HP four-stroke rich burn diesel-fired emergency fire pump, installed in January of 1980, using no control and exhausting to the atmosphere. [40 CFR 63, Subpart ZZZZ];**

\*\*\*\*\*

**SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS**

Emissions Unit Description: \*\*\*\*\*

Charging, Melting, and Pouring/Cooling:

- (a) Unit #23, consisting of: \*\*\*\*\*

Due to power supply limitations the box induction furnace and crucible induction furnace cannot operate simultaneously. The total maximum melt capacity is 8.195 tons per hour. Metallic fume emissions from melting and pouring, including transfer points, controlled by nine (9) baghouse modules, identified as "UU" with a common inlet but nine (9) individual stack discharges. **[40 CFR 63, Subpart ZZZZZZ]**

\*\*\*\*\*

Machining, Grinding, and Finishing:

(e) One (1) Iron Room **for cast iron grinding, boring, and tapping operations**, identified as Unit #5, constructed in 1973 **and approved for modification in 2013**, ~~for cast iron grinding, boring and tapping operations~~, with a maximum throughput of 0.78 tons per hour, using **portable fabric filters as control, exhausting inside the building** ~~Baghouse "G" for particulate emissions control~~;

\*\*\*\*\*

(m) Various machining, grinding, and polishing operations, identified as Unit #26, constructed in 1999 **and approved for modification in 2013**, with a maximum throughput of ~~2.43~~**2.238** tons per hour, using Baghouse "BC" for capturing brass chips to be recycled as well as for controlling dust emissions. The exhaust gas is vented through a drop box to reduce particulate loading and then to the baghouse; \*\*\*\*\*

**Reclamation Unit:**

(u) **One (1) Didion rotary metal reclaimer, approved for construction in 2013, with a maximum throughput of 2.00 tons of metal per hour, using Baghouse "G" for particulate emissions control, exhausting to Stack "G."**

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

**Modification No. 2:**

**PSD Minor Limit – Section D.1 - Particulate**

IDEM, OAQ is adding emission limitations for the Didion Rotary Metal Reclaimer to ensure compliance with 326 IAC 2-2. IDEM, OAQ is adding PM<sub>2.5</sub> emission limitations for all emission units and is removing the PM, PM<sub>10</sub> and PM<sub>2.5</sub> emission limitation for Unit #5. Unit #5 does not need a limit for the source to remain minor for PSD. Revisions are shown below:

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

In order to make the requirements of 326 IAC 2-2 (PSD) not applicable, the PM, **PM<sub>10</sub> and PM<sub>2.5</sub>** and ~~PM<sub>40</sub>~~ emissions from **the Didion Rotary Metal Reclaimer**, Units #5, #6, #11- through #18, #20, #23, #26, #29, and #30 shall not exceed the emissions limits listed in the table below:

Emission Unit	PM Emission Limit (lb/hr)	PM <sub>10</sub> Emission Limit (lb/hr)	<b>PM<sub>2.5</sub> Emission Limit (lb/hr)</b>
Unit #23: Furnace Charging, Melting and Pouring	5.71	5.71	<b>5.71</b>
Unit #6: #1 Handline and Harrison Sand Tanks and Shakeout and Conveyor Operations for #1 Handline, #1 Harrison, #2 Harrison, #4 Sinto Mold Lines	3.42	3.42	<b>3.42</b>
Unit #20: Shakeout and Sand Handling for #1, #2, #3 Sintos	3.42	3.42	<b>3.42</b>
Unit #13: Sand Treatment and Brass Reclaim Operations	2.28	2.28	<b>2.28</b>
<b>Didion Rotary Metal Reclaimer</b>	<b>1.14</b>	<b>1.14</b>	<b>1.14</b>
Unit #5: Iron Room	0.46	0.46	
Unit #11: Shot Blasting	1.14	1.14	<b>1.14</b>
Unit #12: Shot Blasting	0.46	0.46	<b>0.46</b>

Unit #14: Shot Blasting	3.42	3.42	<b>3.42</b>
Unit #15: Grinding and Cut-Off	3.42	3.42	<b>3.42</b>
Unit #16: Machining, Grinding, and Polishing	0.68	0.68	<b>0.68</b>
Unit #17: Machining, Grinding, and Polishing	2.28	2.28	<b>2.28</b>
Unit #18: Machining, Grinding, and Polishing	0.68	0.68	<b>0.68</b>
Unit #26: Machining, Grinding, and Polishing	2.28	2.28	<b>2.28</b>
Unit #29: Shot blast machine	1.14	1.14	<b>1.14</b>
Unit #30: Cut-off saw	1.14	1.14	<b>1.14</b>

Compliance with the above limits, combined with Condition D.1.1 and the potential to emit PM, **PM<sub>10</sub> and PM<sub>2.5</sub>** and ~~PM<sub>40</sub>~~ from other emission units at the source, shall limit the **emissions of PM, PM<sub>10</sub> and PM<sub>2.5</sub>** from the entire source to less than 250 tons per twelve (12) consecutive month period each and render 326 IAC 2-2 not applicable.

**Modification No. 3:**

**326 IAC 6-3-2 - Particulate Limit – Section D.1**

IDEM, OAQ has included PM emission limitations for the Didion Rotary Metal Reclaimer and has updated the emission limit for Unit #26 due to the increase in process weight rate of the unit. Revisions are shown below:

D.1.3 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 Didion Rotary Metal Reclaimer**, Units #5, #6, #11-**through** #20, #23, #26, #29, and #30 shall not exceed the pounds per hour emission limitations when operating at maximum process weight rates as specified in the table below:

Emission Unit	Process Weight Rate (ton/hr)	326 IAC 6-3-2 Allowable Particulate Emission Limit (lb/hr)
*****	*****	*****
<b>Didion Rotary Metal Reclaimer</b>	<b>2.00</b>	<b>6.52</b>
*****	*****	*****
Unit #26: Machining, Grinding, and Polishing	<del>2.13</del> <b>2.238</b>	<del>6.80</del> <b>7.03</b>
*****	*****	*****

\*\*\*\*\*

**Modification No. 4:**

**HAP Minor Limit – Section D.1**

IDEM, OAQ is updating original Condition D.1.4 to include the Didion Rotary Metal Reclaimer. The emission limitation for Unit #5 was removed because the source has chosen to revise the limits of other emission units. Revisions are shown below:

**D.1.4 Hazardous Air Pollutants (Lead) [326 IAC 2-4.1][326 IAC 2-2]**

In order to render the requirements of 326 IAC 2-4.1 and 326 IAC 2-2 not applicable, the lead emissions from **the Didion Rotary Metal Reclaimer**, Units #5, #6, #11- through #18, #20, #23, #26, #29, and #30 shall not exceed the emissions limits listed in the table below:

Emission Unit	Lead Emission Limit (lb/hr)
*****	*****
<b>Didion Rotary Metal Reclaimer</b>	<b>0.012</b>
<del>Unit #5: Iron Room</del>	<del>0.005</del>
*****	*****

\*\*\*\*\*

**Modification No. 5:**

**Preventive Maintenance Plan – Section D.1**

On October 27, 2010, the Indiana Pollution Control Board issued revisions to 326 IAC 2. These revisions resulted in changes to the rule sites listed in the permit. These changes are not changes to the underlying provisions. IDEM, OAQ is clarifying the Permittee's obligation in regard to the preventive maintenance plan. Revisions are shown below:

**D.1.5 Preventive Maintenance Plan [326 IAC 2-7-5(132)]**

~~A Preventive Maintenance Plan, in accordance with Section B – Preventive Maintenance Plan, of this permit, is required for these units and their control devices.~~ **A Preventive Maintenance Plan (PMP) is required for these facilities and their associated control device. Section B – Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.**

**Modification No. 6:**

**Particulate Control – Section D.1**

IDEM, OAQ is clarifying original Condition D.1.6. References to the new emission unit have been added. Revisions are shown below:

**D.1.6 Particulate Control**

- (a) In order to comply with Conditions D.1.2, D.1.3, and D.1.4, the baghouses and cartridge filters for particulate control shall be in operation and controlling emissions from **the Didion Rotary Metal Reclaimer**, Units #5, #6, #11- through #18, #20, #23, #26, #29, and #30 at all times these units are in operation.

\*\*\*\*\*

## Modification No. 7:

### Testing Requirements – Section D.1

IDEM, OAQ is updating the testing requirements to reflect the addition of PM<sub>2.5</sub> emission limitations for all emission units, the addition of the Didion Rotary Metal Reclaimer and to clarify the conditions. Testing requirements for the Iron Room (Unit #5) have been removed. Testing requirements for these units are no longer required because they are now controlled by individual fabric filters and require a very low level of particulate reduction in order to achieve the emission limitations. Also, the PSD minor limit for lead has been removed. Revisions are shown below:

#### D.1.7 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

---

In order to demonstrate the compliance status with Conditions D.1.2, D.1.3, and D.1.4, the Permittee shall:

- (a) **perform PM, PM<sub>10</sub>, PM<sub>2.5</sub> and lead testing on the stack of Baghouse UU controlling emissions from Unit #23, utilizing methods approved by the Commissioner. These tests shall be repeated at least once every five years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee’s obligation with regard to the performance testing required by this condition. PM<sub>10</sub> and PM<sub>2.5</sub> contain filterable and condensable PM.**~~Perform PM, PM<sub>10</sub>, and lead testing on the baghouse modules UU for Unit #23 within 180 days of issuance of Part 70 Operating Permit No. T169-25077-00003 or within 180 days of publication of the new or revised condensable PM test method(s) referenced in the U. S. EPA’s Final Rule for Implementation of the New Source Review (NSR) Program for Particulate Matter Less Than 2.5 Micrometers (PM<sub>2.5</sub>), published in the May 16, 2008 Federal Register, whichever is later. These tests shall be repeated every five (5) years from the date of the most recent valid compliance demonstration. This testing shall be conducted utilizing methods as approved by the Commissioner. PM<sub>10</sub> includes filterable and condensable PM.~~
- (b) **perform PM, PM<sub>10</sub>, PM<sub>2.5</sub> and lead testing on the stack of Baghouse H controlling emissions from Unit #6, utilizing methods approved by the Commissioner. These tests shall be repeated at least once every five years from the date of the most recent valid compliance demonstration on one (1) emission unit from Group A, as specified in the table below. Testing on any individual emission unit shall not be repeated until each emission unit in Group A has been tested. PM<sub>10</sub> and PM<sub>2.5</sub> contain filterable and condensable PM.**~~Perform PM, PM<sub>10</sub>, and lead testing for baghouse H for Unit #6 within 180 days of issuance of Part 70 Operating Permit No. T169-25077-00003 or within 180 days publication of the new or revised condensable PM test method(s) referenced in the U. S. EPA’s Final Rule for Implementation of the New Source Review (NSR) Program for Particulate Matter Less Than 2.5 Micrometers (PM<sub>2.5</sub>), published in the May 16, 2008 Federal Register, whichever is later. This testing shall be conducted utilizing methods as approved by the Commissioner. These tests shall be repeated every five (5) years from the date of the most recent valid compliance demonstration on one (1) emission unit from Group A, as specified in the table below. Testing on any individual emission unit shall not be repeated until each unit in Group A has been tested. PM<sub>10</sub> includes filterable and condensable PM.~~
- \*\*\*\*\*
- (c) **perform PM, PM<sub>10</sub>, PM<sub>2.5</sub> and lead testing on the stack of Baghouse G controlling emissions from Didion Rotary Metal Reclaimer, within sixty (60) days of reaching maximum capacity but no later than one hundred and eighty (180) days after initial startup, utilizing methods approved by the Commissioner. These tests shall be repeated at least once every five years from the date of the most recent valid compliance demonstration on one (1) emission unit from Group B, as specified in the table below. Testing on any individual emission unit shall not be repeated until**

**each emission unit in Group B has been tested. PM<sub>10</sub> and PM<sub>2.5</sub> contain filterable and condensable PM.** Perform PM, PM<sub>10</sub>, and lead testing for baghouse V for Unit #15 within 180 days of issuance of Part 70 Operating Permit No. T169-25077-00003 or within 180 days publication of the new or revised condensable PM test method(s) referenced in the U. S. EPA's Final Rule for Implementation of the New Source Review (NSR) Program for Particulate Matter Less Than 2.5 Micrometers (PM<sub>2.5</sub>), published in the May 16, 2008 Federal Register, whichever is later. This testing shall be conducted utilizing methods as approved by the Commissioner. These tests shall be repeated every five (5) years from the date of the most recent valid compliance demonstration on one (1) emission unit from Group B, as specified in the table below. Testing on any individual emission unit shall not be repeated until each unit in Group B has been tested. PM<sub>10</sub> includes filterable and condensable PM.

Group B Emission Units	
Emission Unit	Baghouse
Unit #15: Grinding and Cut-Off	V
<del>Unit #5: Iron Room</del> <b>Didion Rotary Metal Reclaimer</b>	G
Unit #16: Machining, Grinding, and Polishing	W
Unit #17: Machining, Grinding, and Polishing	X
Unit #18: Machining, Grinding, and Polishing	Y
Unit #26: Machining, Grinding, and Polishing	BC
Unit #30: Cut-off saw	Unit #30 cartridge filter

- (d) **perform PM, PM<sub>10</sub>, PM<sub>2.5</sub> and lead testing on the stack of Baghouse U controlling emissions from Unit #14, utilizing methods approved by the Commissioner. These tests shall be repeated at least once every five years from the date of the most recent valid compliance demonstration on one (1) emission unit from Group C, as specified in the table below. Testing on any individual emission unit shall not be repeated until each emission unit in Group C has been tested. PM<sub>10</sub> and PM<sub>2.5</sub> contain filterable and condensable PM.** Perform PM, PM<sub>10</sub>, and lead testing for baghouse U for Unit #14 within 180 days of issuance of Part 70 Operating Permit No. 169-25077-00003 or within 180 days publication of the new or revised condensable PM test method(s) referenced in the U. S. EPA's Final Rule for Implementation of the New Source Review (NSR) Program for Particulate Matter Less Than 2.5 Micrometers (PM<sub>2.5</sub>), published in the May 16, 2008 Federal Register, whichever is later. This testing shall be conducted utilizing methods as approved by the Commissioner. These tests shall be repeated every five (5) years from the date of the most recent valid compliance demonstration on one (1) emission unit from Group C, as specified in the table below. Testing on any individual emission unit shall not be repeated until each unit in Group C has been tested. PM<sub>10</sub> includes filterable and condensable PM.

\*\*\*\*\*

**Modification No. 8:**

**Visible Emission Notations – Section D.1**

IDEM, OAQ is clarifying the requirements for VE notations. Revisions are shown below:

**D.1.10 Visible Emissions Notations**

For baghouses or cartridge filters that are not equipped with a continuous broken bag (leak) detector or as an alternative to complying with Condition D.1.9, the Permittee shall comply with the following:

\*\*\*\*\*

- (e) ~~If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C – Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C – Response to Excursions or Exceedances shall be considered a deviation from this permit.~~ **If abnormal emissions are observed, the Permittee shall take reasonable response steps. Failure to take response steps shall be considered a deviation from this permit. Section C – Response to Excursions or Exceedances contains the Permittee’s obligation with regard to the reasonable response steps required by this condition.**

**Modification No. 9:**

**Parametric Monitoring – Section D.1**

IDEM, OAQ is clarifying the parametric monitoring condition in Section D.1. Also, the metal reclaiming unit has been added. Unit #5 has been removed because the emission units are now controlled by individual fabric filters. Revisions are shown below:

**D.1.11 Parametric Monitoring**

For baghouses and cartridge filters that are not equipped with a continuous broken bag (leak) detector or as an alternative to complying with Condition D.1.9, the Permittee shall record the pressure drop across each baghouse at least once per day when each emissions unit is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range, **the Permittee shall take a reasonable response. The normal pressure is listed in the table below, unless a different upper-bound or lower-bound value for this range is determined during the latest valid compliant stack test.** ~~or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions and Exceedances~~ **contains the Permittee’s obligation with regard to the reasonable response steps required by this condition.** A pressure reading that is outside the above mentioned range is not a deviation from this permit. ~~Failure to take response steps in accordance with Section C – Response to Excursions or Exceedances, shall be considered a deviation from this permit.~~

Emission Unit	Baghouse	Pressure Drop Range (inches of water)
*****	*****	*****
<b>Didion Rotary Metal Reclaimer</b>	<b>G</b>	<b>1.5 to 5.5</b>
Unit #5: Iron Room	G	1.5 to 5.5
*****	*****	*****

**Modification No. 10:**

**Record Keeping Requirements – Section D.1**

IDEM, OAQ is clarifying original Condition D.1.14. Revisions are shown below:

**D.1.14 Record Keeping Requirement**

- (a) ~~To document compliance with~~ **In order to document the compliance status with** Condition D.1.1, the Permittee shall maintain records of the type and amount of metal melted in the furnaces sufficient to show compliance with Condition D.1.1.

\*\*\*\*\*

- (e) ~~All records shall be maintained in accordance with Section C – General Record Keeping Requirements, of this permit.~~ **Section C – General Record Keeping Requirements contains the Permittee’s obligation with regard to the record keeping required by this condition.**

**Modification No. 11:**

**Emission Unit List - Section D.2**

IDEM, OAQ is clarifying emission unit list in Section D.2. IDEM, OAQ is removing emission units from the facility description box that no longer have applicable conditions. Revisions are shown below:

**SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS**

**Emissions Unit Description:**

**Combustion Units:**

- (a) ~~Two (2) natural gas fired boilers for building heating, identified as Units #1 and #2, installed in 2009, each with a maximum heat input capacity of 7.325 MMBtu/hr, and exhausting to Stack "A";~~
- (b) ~~Two (2) diesel fuel-fired 423 maximum horsepower (2.9 million British thermal Units per hour) generators, installed in 1992.~~

**Insignificant Activities:**

- (d) **Natural gas-fired combustion sources with heat input equal to or less than ten (10) million British Thermal Units per hour, including, but not limited to:**

**Two (2) natural gas fired boilers for building heating, identified as Units #1 and #2, installed in 2009, each with a maximum heat input capacity of 7.325 MMBtu/hr, and exhausting to Stack "A"; [326 IAC 6-2-4]**

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

## Modification No. 12:

### Record Keeping Requirements – Section D.2

IDEM, OAQ is removing original conditions D.2.1, D.2.3 and D.2.4. These conditions are not required because IDEM, OAQ now calculates PTE for emergency generators and fire pump engines at 500 hours per twelve consecutive month period. Original Condition D.2.2 was renumbered to D.2.1. The table of contents was updated and the reporting forms for the emergency generators were removed. Revisions are shown below:

#### ~~D.2.1 PSD Minor Limit – Carbon Monoxide [326 IAC 2-2]~~

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~~The Permittee shall comply with the following:~~

~~The hours of operation for the two (2) diesel fuel-fired 423 horsepower generators shall not exceed 500 hours per twelve (12) consecutive month period, each, with compliance determined at the end of each month.~~

~~Compliance with the above limit, combined with the potential to emit CO from other emission units at the source, shall limit the CO from the entire source to less than 250 tons per twelve (12) consecutive month period and render 326 IAC 2-2 not applicable.~~

#### ~~D.2.12 Particulate Emissions [326 IAC 6-2-4]~~

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~~\*\*\*\*\*~~

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

#### ~~D.2.3 Record Keeping Requirements~~

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~~(a) In order to document the compliance status with Condition D.2.1, the Permittee shall maintain records of the hours of operation of each of the two (2) diesel fuel-fired 423 horsepower generators.~~

~~(b) Section C – General Record Keeping Requirements contains the Permittee's obligation with regard to the record keeping required by this condition.~~

#### ~~D.2.4 Reporting Requirements~~

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~~A semiannual summary of the information to document compliance with Condition D.2.1 shall be submitted to the address listed in Section C – General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).~~

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

**Part 70 Semiannual Report**

Source Name: \_\_\_\_\_ Ford Meter Box Company, Inc. \_\_\_\_\_  
Source Address: \_\_\_\_\_ 775 Manchester Drive, Wabash, Indiana 46992 \_\_\_\_\_  
Mailing Address: \_\_\_\_\_ PO Box 398, 775 Manchester Ave., Wabash, Indiana 46992-0398 \_\_\_\_\_  
Part 70 Permit No.: \_\_\_\_\_ T169-25077-00003 \_\_\_\_\_  
Facility: \_\_\_\_\_ One (1) diesel fuel-fired 423 maximum horsepower generator \_\_\_\_\_  
Pollutant: \_\_\_\_\_ CO \_\_\_\_\_  
Limit: \_\_\_\_\_ 500 hours of operation per twelve (12) consecutive month period. \_\_\_\_\_

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

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			
Month 4			
Month 5			
Month 6			

\_\_\_\_\_  
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 AND ENFORCEMENT BRANCH**

**Part 70 Semiannual Report**

Source Name: Ford Meter Box Company, Inc.  
Source Address: 775 Manchester Drive, Wabash, Indiana 46992  
Mailing Address: PO Box 398, 775 Manchester Ave., Wabash, Indiana 46992-0398  
Part 70 Permit No.: T169-25077-00003  
Facility: One (1) diesel fuel-fired 423 maximum horsepower generator  
Pollutant: CO  
Limit: 500 hours of operation per twelve (12) consecutive month period.

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

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			
Month 4			
Month 5			
Month 6			

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

Attach a signed certification to complete this report.

### Modification No. 13:

#### Emission Unit List - Section D.3

IDEM, OAQ is clarifying emission unit list in Section D.3.

### SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

#### Emissions Unit Description:

##### Surface Coating Operations:

- (ar) One (1) Binks Teflon spray coating booth, identified as Unit #21, installed in 1980, with a maximum rate of 121.7 units per hour, using a semi-automatic air atomization application method for coating brass balls, using paper air filters for overspray control, and exhausting to Stack "OO".

##### Insignificant Activities:

- (bhh) One (1) powder coating booth, used for epoxy coating, with a maximum capacity of eighteen (18) units per hour, using an integral cartridge filter for particulate capture and reuse, constructed in 1993 [326 IAC 6-3-2].

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

### Modification No. 14:

#### Particulate – Section D.3

IDEM, OAQ is correcting the 326 IAC 6-3-2 PM emission limitation for the powder coating booth. Revisions are shown below:

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

- (a) ~~\*\*\*\*\*~~
- (b) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the powder coating booth shall not exceed ~~0.450~~**0.551** pounds per hour ~~when operating at a process weight rate of 73.6 pounds per hour.~~

~~The pounds per hour limitations were calculated with the equations below:~~

~~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:~~

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

### Modification No. 15:

#### Preventive Maintenance Plan – Section D.3

IDEM, OAQ has clarified the PMP condition in Section D.3. Revisions are shown below:

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

~~A Preventive Maintenance Plan, in accordance with Section B – Preventive Maintenance Plan, of this permit, is required for these units and their control devices.~~ **A Preventive Maintenance Plan (PMP) is required for these facilities and their associated control device. Section B – Preventive Maintenance Plan contains the Permittee’s obligation with regard to the preventive maintenance plan required by this condition.**

### Modification No. 16:

#### Parametric Monitoring – Section D.3

IDEM, OAQ is clarifying original Condition D.3.3. In addition, Condition D.3.3(b) was removed because the Permittee uses a cartridge filter and not a baghouse to control particulate emissions from the powder coating booth. Revisions are shown below:

#### D.3.3 Particulate Control

~~(a) In order to comply~~ **In order to demonstrate the compliance status** with Conditions D.3.1(b), the ~~baghouse~~**filter** for particulate control shall be in operation and control emissions from the powder coating booth at all times the powder coating booth 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.~~

### Modification No. 17:

#### Emission Unit Descriptions – Section E.1

IDEM, OAQ is revising the facility description box in Section E.1 to match the description in Section A. Revisions are shown below:

#### SECTION E.1 FACILITY OPERATION CONDITIONS

Emissions Unit Description:

##### Charging, Melting, and Pouring/Cooling:

(a) Unit #23, consisting of: \*\*\*\*\*

Due to power supply limitations the box induction furnace and crucible induction furnace cannot operate simultaneously. The total maximum melt capacity is 8.195 tons per hour. Metallic fume emissions from melting and pouring, including transfer points, controlled by nine (9) baghouse modules, identified as “UU” with a common inlet but nine (9) individual stack discharges. **[40 CFR 63, Subpart ZZZZZZ]**

\*\*\*\*\*

**Modification No. 18:**

**40 CFR 63, Subpart ZZZZ – Section E.2**

IDEM, OAQ is adding the applicable requirement of 40 CFR 63, Subpart ZZZZ to the Part 70 Operating Permit. Proposed revisions are shown below:

**SECTION E.2 FACILITY OPERATING CONDITIONS**

**Emissions Unit Description:**

- (p) One (1) 100 KW spark ignition internal combustion natural gas-fired emergency generator, constructed in 2007, used to generate electric power, with a maximum power output rate of 134.1 horsepower, firing natural gas only, using no control and exhausting to the atmosphere. [40 CFR 63, Subpart ZZZZ]
- (q) Two (2) diesel fuel-fired 423 maximum horsepower (2.9 million British thermal Units per hour) emergency generators, installed in 1992. [40 CFR 63, Subpart ZZZZ]

**Insignificant Activity**

- (bb) One (1) 100 HP four-stroke rich burn diesel-fired emergency fire pump, installed in January of 1980, using no control and exhausting to the atmosphere. [40 CFR 63, Subpart ZZZZ]

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

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

**E.2.1 General Provisions Relating to NESHAP ZZZZ [326 IAC 20-1][40 CFR 63, Subpart A]**

Pursuant to 40 CFR 63.6665, 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, as specified in Table 8 of 40 CFR Part 63, Subpart ZZZZ in accordance with schedule in 40 CFR 63 Subpart ZZZZ.

**E.2.2 National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines [40 CFR 63, Subpart ZZZZ][326 IAC 20-82]**

The Permittee shall comply with the following provisions of 40 CFR 63, Subpart ZZZZ, which are incorporated by reference as 326 IAC 20-82 (included as Attachment B of this permit) as specified below:

- (a) For the 100 HP diesel-fired emergency fire pump and both 423 HP diesel-fired emergency generators, the Permittee shall comply with the following:
  - (1) 40 CFR 63.6580;
  - (2) 40 CFR 63.6585
  - (3) 40 CFR 63.6590(a)(1)(iii);
  - (4) 40 CFR 63.6595(a)(1) (b), (c);
  - (5) 40 CFR 63.6603(a);
  - (6) 40 CFR 63.6605;
  - (7) 40 CFR 63.6625(e)(3), (f), (h), (i), (j);
  - (8) 40 CFR 63.6635;
  - (9) 40 CFR 63.6640(a), (b), (e), (f)(1), (f)(2), (f)(4);
  - (10) 40 CFR 63.6655(d), (e)(2), (e)(3);
  - (11) 40 CFR 63.6650;

- (12) 40 CFR 63.6655;
- (13) 40 CFR 63.6660;
- (14) 40 CFR 63.6665;
- (15) 40 CFR 63.6670;
- (16) 40 CFR 63.6675;
- (17) Table 2d (items 4); and
- (18) Table 6 (item 9)
- (19) Table 8

(b) For the 100 KW natural gas-fired emergency generator, the Permittee shall comply with the following:

- (1) 40 CFR 63.6580
- (2) 40 CFR 63.6585
- (3) 40 CFR 63.6590(a)(2)(iii) and (c)(1)
- (4) 40 CFR 63.6665
- (5) 40 CFR 63.6670
- (6) 40 CFR 63.6675

#### Conclusion and Recommendation

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Source Modification No. 169-32985-00003 and Significant Permit Modification No. 169-33227-00003. The staff recommends to the Commissioner that this Part 70 Significant Source and Significant Permit Modification be approved.

#### IDEM Contact

- (a) Questions regarding this proposed permit can be directed to David Matousek at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 232-8253 or toll free at 1-800-451-6027 extension 2-8253.
- (b) A copy of the findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: [www.idem.in.gov](http://www.idem.in.gov)

### Technical Support Document - Appendix A Source-Wide Potential to Emit

**Company Name: The Ford Meter Box Company, Inc.**

**Address: 775 Manchester Avenue, Wabash, Indiana 46992-1420**

**Permit Number: SSM 169-32985-00003 & SPM 169-33227-00003**

**Reviewer: David Matousek**

**Date: May 20, 2013**

Process/Facility	Potential to Emit (tons/year)									
	PM	PM <sub>10</sub>	Direct PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO	GHGs (CO <sub>2</sub> e)	Total HAP	Lead
Furnace Charge/Melt/Pour/(Unit #23)	204.61	117.73	117.73	0.72	0.36	5.02	215.36	0.00	16.09	13.09
Unit #6 (Described in Note (a))	1,050.81	189.21	189.21	0.00	0.00	21.54	0.00	0.00	3.27	3.27
Shakeout & Sand Handling for #1, #2, #3 Sintos (Unit #20)	766.99	146.63	146.63	0.00	0.00	21.54	0.00	0.00	2.39	2.39
Sand Treatment & Brass Reclaim Operations (Unit #13)	236.52	35.48	35.48	0.00	0.00	0.00	0.00	0.00	0.47	0.47
Didion Metal Reclaimer	28.03	19.62	19.62	0.00	0.00	10.51	0.00	0.00	0.06	0.06
Corerom Ventilation (Unit #19)	39.50	32.38	32.38	0.35	19.01	3.17	0.89	1,262	4.00	5.29E-06
Iron Room (Unit #5)	17.63	5.81	5.81	0.00	0.00	0.00	0.00	0.00	0.07	0.07
Shotblasting (Unit #11)	203.28	20.33	20.33	0.00	0.00	0.00	0.00	0.00	6.10	6.10
Shotblasting (Unit #12)	102.01	10.20	10.20	0.00	0.00	0.00	0.00	0.00	3.06	3.06
Shotblasting (Unit #14)	610.20	61.02	61.02	0.00	0.00	0.00	0.00	0.00	1.08	1.08
Shot Blast Unit (2009) (Unit #29)	148.92	14.89	14.89	0.00	0.00	0.00	0.00	0.00	0.35	0.35
Grinding & Cut-Off (Unit #15)	185.21	61.02	61.02	0.00	0.00	0.00	0.00	0.00	8.97	8.97
Cut-Off Saw (2009) (Unit #30)	148.92	14.89	14.89	0.00	0.00	0.00	0.00	0.00	0.35	0.35
Mach., Grind., & Polish (Unit #16)	58.08	5.81	5.81	0.00	0.00	0.00	0.00	0.00	2.87	2.87
Mach., Grind., & Polish (Unit #17)	158.67	15.87	15.87	0.00	0.00	0.00	0.00	0.00	7.84	7.84
Mach., Grind., & Polish (Unit #18)	67.01	6.70	6.70	0.00	0.00	0.00	0.00	0.00	3.31	3.31
Mach., Grind., & Polish (Unit #26)	166.64	16.67	16.67	0.00	0.00	0.00	0.00	0.00	8.23	8.23
100 KW Generator	2.22E-05	0.00	0.00	1.69E-04	1.17	0.03	0.09	34	0.02	0.00
Two 423 HP Generators	0.47	0.47	0.47	0.43	6.56	0.53	1.41	241	0.01	0.00
100 HP Fire Pump	0.06	0.06	0.06	0.05	0.78	0.06	0.17	29	6.63E-04	0.00
Binks Spray Booth (Unit #21)	4.00	4.00	4.00	0.00	0.00	11.96	0.00	0.00	6.22	0.00
Nut Coat Ops (Unit #27)	0.00	0.00	0.00	0.00	0.00	2.55	0.00	0.00	0.00	0.00
Misc. Painting and Gluing Activities	2.64	2.64	2.64	0.00	0.00	10.30	0.00	0.00	2.40	0.00
Chip Dryers	0.63	0.70	0.70	0.26	1.41	0.07	1.15	1,638	0.03	0.00
Boilers #1 and #2	0.12	0.48	0.48	0.04	6.29	0.35	5.28	7,507	0.12	0.00
Misc. Natural Gas Combustion	0.08	0.33	0.33	0.26	1.41	0.07	3.61	5,125	0.08	0.00
Misc. LPG/Butane Combustion	0.06	0.21	0.21	0.14	3.86	0.29	2.16	3,778	0.00	0.00
Tool Grinding Operation (Unit #8)	1.41	0.42	0.42	0.00	0.00	0.00	0.00	0.00	0.01	0.01
Powder Coating Booth	6.88	6.88	6.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Insignificant Activities (Unspecified)	10.00	10.00	10.00	0.00	0.00	10.00	0.00	0.00	0.00	0.00
<b>Total</b>	<b>4,219.38</b>	<b>800.45</b>	<b>800.45</b>	<b>2.25</b>	<b>40.85</b>	<b>97.99</b>	<b>230.12</b>	<b>19,614</b>	<b>77.40</b>	<b>61.52</b>

**Note:**

(a) Unit #6 - #1 Handline and Harrison Sand Tanks and Shakeout and conveyor operations for #1 Handline, #1 Harrison, #2 Harrison, #4 Sinto Mold Line

### Technical Support Document - Appendix A Source-Wide Potential to Emit (Continued)

Process/Facility	Controlled Potential to Emit (tons/year)									
	PM	PM <sub>10</sub>	Direct PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO	GHGs (CO <sub>2</sub> e)	Total HAP	Lead
Furnace Chrg/Melt/Pour/(Unit #23)	22.50	12.95	12.95	0.72	0.36	5.02	215.36	0	3.72	1.44
Unit #6 (Described in Note (a))	10.50	1.89	1.89	0.00	0.00	21.54	0.00	0	0.06	0.06
Shakeout & Sand Handling for #1, #2, #3 Sintos (Unit #20)	7.67	1.46	1.46	0.00	0.00	21.54	0.00	0	0.04	0.04
Sand Treatment & Brass Reclaim Operations (Unit #13)	2.37	0.35	0.35	0.00	0.00	0.00	0.00	0	0.01	0.01
Didion Metal Reclaimer	0.28	0.20	0.20	0.00	0.00	10.51	0.00	0	0.001	0.001
Corerroom Ventilation (Unit #19)	39.50	32.38	32.38	0.35	19.01	3.17	0.89	1,262	4.00	5.29E-06
Iron Room (Unit #5)	0.18	0.06	0.06	0.00	0.00	0.00	0.00	0	1.40E-03	1.40E-03
Shotblasting (Unit #11)	2.03	0.20	0.20	0.00	0.00	0.00	0.00	0	0.12	0.12
Shotblasting (Unit #12)	1.02	0.02	0.10	0.00	0.00	0.00	0.00	0	0.06	0.06
Shotblasting (Unit #14)	6.10	0.61	0.61	0.00	0.00	0.00	0.00	0	0.02	0.02
Shot Blast Unit (2009) (Unit #29)	1.49	0.15	0.15	0.00	0.00	0.00	0.00	0	1.00E-02	1.00E-02
Grinding & Cut-Off (Unit #15)	1.85	0.61	0.61	0.00	0.00	0.00	0.00	0	0.18	0.18
Cut-Off Saw (2009) (Unit #30)	1.49	0.15	0.15	0.00	0.00	0.00	0.00	0	1.00E-02	1.00E-02
Mach., Grind., & Polish (Unit #16)	0.58	0.06	0.06	0.00	0.00	0.00	0.00	0	0.06	0.06
Mach., Grind., & Polish (Unit #17)	1.59	0.16	0.16	0.00	0.00	0.00	0.00	0	0.16	0.16
Mach., Grind., & Polish (Unit #18)	0.67	0.07	0.07	0.00	0.00	0.00	0.00	0	0.07	0.07
Mach., Grind., & Polish (Unit #26)	1.67	0.17	0.17	0.00	0.00	0.00	0.00	0	0.16	0.16
100 KW Generator	2.22E-05	0.00	0.00	1.69E-04	1.17	0.03	0.09	34	0.02	0.00
Two 423 HP Generators	0.47	0.47	0.47	0.43	6.56	0.53	1.41	241	0.01	0.00
100 HP Fire Pump	0.06	0.06	0.06	0.05	0.78	0.06	0.17	29	6.63E-04	0.00
Binks Spray Booth (Unit #21)	0.40	0.40	0.40	0.00	0.00	11.96	0.00	0	6.22	0.00
Nut Coat Ops. (Unit #27)	0.00	0.00	0.00	0.00	0.00	2.55	0.00	0	0.00	0.00
Misc. Painting and Gluing Activities	0.01	0.01	0.01	0.00	0.00	10.30	0.00	0	2.40	0.00
Chip Dryers	0.63	0.70	0.70	0.26	1.41	0.07	1.15	1,638	0.03	0.00
Boilers #1 and #2	0.12	0.48	0.48	0.04	6.29	0.35	5.28	7,507	0.12	0.00
Misc. Natural Gas Combustion	0.08	0.33	0.33	0.03	4.29	0.24	3.61	5,125	0.08	0.00
Misc. LPG/Butane Combustion	0.06	0.21	0.21	0.14	3.86	0.29	2.16	3,778	0.00	0.00
Tool Grinding Operation (Unit #8)	0.01	4.20E-03	4.20E-03	0.00	0.00	0.00	0.00	0	2.00E-04	2.00E-04
Powder Coating Booth	0.03	0.03	0.03	0.00	0.00	0.00	0.00	0	0.00	0.00
Insignificant Activities (Unspecified)	10.00	10.00	10.00	0.00	0.00	10.00	0.00	0	0.00	0.00
<b>Total</b>	<b>113.36</b>	<b>64.18</b>	<b>64.26</b>	<b>2.02</b>	<b>43.73</b>	<b>98.16</b>	<b>230.12</b>	<b>19,614</b>	<b>17.56</b>	<b>2.40</b>

**Notes on PTE Sheets:**

- 1) Under the Part 70 Permit Program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated pollutant."
- 2) NA = not applicable
- 3) negl. = negligible
- 4) Unit #6 - #1 Handline and Harrison Sand Tanks and Shakeout and conveyor operations for #1 Handline, #1 Harrison, #2 Harrison, #4 Sinto Mold Line

### Technical Support Document - Appendix A Source-Wide Potential to Emit (Continued)

Process/Facility	Limited Potential to Emit (tons/year)									
	PM	PM <sub>10</sub>	Direct PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO	GHGs (CO <sub>2</sub> e)	Total HAP	Lead
Furnace Charge/Melt/Pour/(Unit #23)	25.01	25.01	25.01	0.72	0.36	5.02	215.36	0	5.40	2.40
Unit #6 (Described in Note (a))	14.98	14.98	14.98	0.00	0.00	21.54	0.00	0	0.15	0.15
Shakeout & Sand Handling for #1, #2, #3 Sintos (Unit #20)	14.98	14.98	14.98	0.00	0.00	21.54	0.00	0	0.15	0.15
Sand Treatment & Brass Reclaim Operations (Unit #13)	9.99	9.99	9.99	0.00	0.00	0.00	0.00	0	0.04	0.04
Didion Metal Reclaimer	4.99	4.99	4.99	0.00	0.00	10.51	0.00	0	0.05	0.05
Corerroom Ventilation (Unit #19)	39.50	32.39	32.39	0.35	19.01	3.17	0.89	1,262	4.00	5.29E-06
Iron Room (Unit #5)	15.19	5.81	5.81	0.00	0.00	0.00	0.00	0	0.07	0.07
Shotblasting (Unit #11)	4.99	4.99	4.99	0.00	0.00	0.00	0.00	0	0.52	0.52
Shotblasting (Unit #12)	2.01	2.01	2.01	0.00	0.00	0.00	0.00	0	0.26	0.26
Shotblasting (Unit #14)	14.98	14.98	14.98	0.00	0.00	0.00	0.00	0	0.08	0.08
Shot Blast Unit (2009) (Unit #29)	4.99	4.99	4.99	0.00	0.00	0.00	0.00	0	0.10	0.10
Grinding & Cut-Off (Unit #15)	14.98	14.98	14.98	0.00	0.00	0.00	0.00	0	1.50	1.50
Cut-Off Saw (2009) (Unit #30)	4.99	4.99	4.99	0.00	0.00	0.00	0.00	0	0.10	0.10
Mach., Grind., & Polish (Unit #16)	2.98	2.98	2.98	0.00	0.00	0.00	0.00	0	0.25	0.25
Mach., Grind., & Polish (Unit #17)	9.99	9.99	9.99	0.00	0.00	0.00	0.00	0	1.34	1.34
Mach., Grind., & Polish (Unit #18)	2.98	2.98	2.98	0.00	0.00	0.00	0.00	0	0.28	0.28
Mach., Grind., & Polish (Unit #26)	9.99	9.99	9.99	0.00	0.00	0.00	0.00	0	1.34	1.34
100 KW Generator	2.22E-05	0.00	0.00	1.69E-04	1.17	0.03	0.09	34	0.02	0.00
Two 423 HP Generators	0.47	0.47	0.47	0.43	6.56	0.53	1.41	241	0.01	0.00
100 HP Fire Pump	0.06	0.06	0.06	0.05	0.78	0.06	0.17	29	6.63E-04	0.00
Binks Spray Booth (Unit #21)	0.40	0.40	0.40	0.00	0.00	11.96	0.00	0	6.22	0.00
Nut Coat Ops (Unit #27)	0.00	0.00	0.00	0.00	0.00	2.55	0.00	0	0.00	0.00
Misc. Painting and Gluing Activities	2.64	2.64	2.64	0.00	0.00	10.30	0.00	0	2.40	0.00
Chip Dryers	0.63	0.70	0.70	0.26	1.35	0.07	1.14	1,638	0.03	0.00
Boilers #1 and #2	0.12	0.48	0.48	0.04	6.29	0.35	5.28	7,507	0.12	0.00
Misc. Natural Gas Combustion	0.08	0.33	0.33	0.03	4.29	0.24	3.61	5,125	0.08	0.00
Misc. LPG/Butane Combustion	0.06	0.21	0.21	0.14	3.86	0.29	2.16	3,778	0.00	0.00
Tool Grinding Operation (Unit #8)	0.01	4.20E-03	4.20E-03	0.00	0.00	0.00	0.00	0	2.00E-04	2.00E-04
Powder Coating Booth	0.03	0.03	0.03	0.00	0.00	0.00	0.00	0	0.00	0.00
Insignificant Activities (Unspecified)	10.00	10.00	10.00	0.00	0.00	10.00	0.00	0	0.00	0.00
Total	212.02	196.36	196.36	2.02	43.67	98.16	230.11	19,614	24.51	8.63
Title V Major Source Thresholds	NA	100	100	100	100	100	100	100,000	25	10
PSD Major Source Thresholds	250	250	250	250	250	250	250	100,000	NA	NA

**Note:**

(a) Unit #6 - #1 Handline and Harrison Sand Tanks and Shakeout and conveyor operations for #1 Handline, #1 Harrison, #2 Harrison, #4 Sinto Mold Line

## Technical Support Document - Appendix A Potential to Emit Calculations / Unit #23 - Charging, Melting, Pouring, and Casting

**Company Name: The Ford Meter Box Company, Inc.**  
**Address: 775 Manchester Avenue, Wabash, Indiana 46992-1420**  
**Permit Number: SSM 169-32985-00003 & SPM 169-33227-00003**  
**Reviewer: David Matousek**  
**Date: May 20, 2013**

Charging - 8 Furnaces				Throughput 8.195				Baghouse UU
Pollutant	Emission Factor	PTE (lb/hr)	PTE (TPY)	Control Efficiency	Controlled PTE (lb/hr)	Controlled PTE (TPY)	Limited PTE (TPY)	Comments
PM	0.6 lb/ton	4.917	21.54	89.00%	0.541	2.37	See Note 7	SCC# 3-04-003-15
PM <sub>10</sub>	0.36 lb/ton	2.950	12.92	89.00%	0.325	1.42		SCC# 3-04-003-15
PM <sub>2.5</sub>	0.36 lb/ton	2.950	12.92	89.00%	0.325	1.42		SCC# 3-04-003-15
Lead	0.038 lb/ton	0.311	1.36	89.00%	0.034	0.15	See Note 8	Source analysis: lead content is 6.41% of PM emissions
Total HAP		0.311	1.36		0.034	0.15	See Note 9	

Melting - 8 Furnaces				Throughput 8.195				Baghouse UU
Pollutant	Emission Factor	PTE (lb/hr)	PTE (TPY)	Control Efficiency	Controlled PTE (lb/hr)	Controlled PTE (TPY)	Limited PTE (TPY)	Comments
PM	0.90 lb/ton	7.376	32.31	89.00%	0.811	3.55	See Note 7	SCC# 3-04-003-03
PM <sub>10</sub>	0.86 lb/ton	7.048	30.87	89.00%	0.775	3.40		SCC# 3-04-003-03
PM <sub>2.5</sub>	0.86 lb/ton	7.048	30.87	89.00%	0.775	3.40		SCC# 3-04-003-03
Manganese	0.0225 lb/ton	0.184	0.81	89.00%	0.02	0.09	0.81	SCC# 3-04-003-03
Lead	0.058 lb/ton	0.475	2.08	89.00%	0.052	0.23	See Note 8	Source analysis: lead content is 6.41% of PM emissions
Total HAP		0.660	2.89		0.07	0.32	See Note 9	

Pouring and Casting				Throughput 8.195				Baghouse UU
Pollutant	Emission Factor	PTE (lb/hr)	PTE (TPY)	Control Efficiency	Controlled PTE (lb/hr)	Controlled PTE (TPY)	Limited PTE (TPY)	Comments
PM	4.20 lb/ton	34.419	150.76	89.00%	3.786	16.58	See Note 7	SCC# 3-04-003-20
PM <sub>10</sub>	2.06 lb/ton	16.882	73.94	89.00%	1.857	8.13		SCC# 3-04-003-20
PM <sub>2.5</sub>	2.06 lb/ton	16.882	73.94	89.00%	1.857	8.13		SCC# 3-04-003-20
SO <sub>2</sub>	0.02 lb/ton	0.164	0.72	0.00%	0.164	0.72	0.72	SCC# 3-04-003-20
NOx	0.01 lb/ton	0.082	0.36	0.00%	0.082	0.36	0.36	SCC# 3-04-003-20
VOC	0.14 lb/ton	1.147	5.02	0.00%	1.147	5.02	5.02	SCC# 3-04-003-20
CO	6.00 lb/ton	49.170	215.36	0.00%	49.170	215.36	215.36	See Note 7
Lead	0.269 lb/ton	2.204	9.65	89.00%	0.242	1.06	See Note 8	Source analysis: lead content is 6.41% of PM emissions
Total Organic HAP	0.061 lb/ton	0.500	2.19	0.00%	0.500	2.19	2.19	See Note 6
Total HAP		2.704	11.84		0.742	3.25	See Note 9	Sum of lead and total organic HAP

**Notes:**

- PM<sub>2.5</sub> is assumed to equal PM<sub>10</sub>
- The source cannot run the box induction furnace and the crucible induction furnace at the same time.
- The CO and Total Organic HAPs emission factors include pouring, cooling and shakeout processes.
- Charging (8 furnaces) and Melting for Unit #23 include: 6 Channel Induction Furnaces (1.25 ton/hr, each), 1 Box Induction Furnace (0.695 ton/hr), 1 Crucible Furnace (0.53 ton/hr).
- Pouring and Casting for Unit #23 (7 Lines) include: #1 Handline, Sinto #1, Sinto #2, Sinto #3, Sinto #4, Harrison #1, and Harrison #2
- Emission factor is from "Organic Hazardous Air Pollutant Emission Factors for Iron Foundries," James Schifo, American Foundry Society, June 17, 2007 (Phenolic Hot Box Cores) and the CO emission factor is from an August 11, 2006 memmo from the Indiana Cast Metals Association.
- PSD Minor Limit for total PM, PM<sub>10</sub>, PM<sub>2.5</sub> emissions from Unit #23 at 5.71 lb/hr or 25.01 TPY
- HAP Minor Limit for total lead emissions from Unit #23 at 0.548 lb/hr or 2.4 TPY.
- Total HAP after limit is 2.4 TPY from lead + 3.0 TPY from other HAP = 5.4 TPY.

**Methodology:**

- Emissions (lb/hr) = Throughput (ton/hr) x Emission Factor (lb/ton)
- Emissions (TPY) = Emissions (lb/hr) x 8,760 hr/yr x 1 ton / 2,000 lb
- Controlled Emissions (lb/hr) = Emissions (lb/hr) x (1 - control efficiency)

**Technical Support Document - Appendix A  
Potential to Emit Calculations  
Sand Handling and Shakeout Operations**

**Company Name: The Ford Meter Box Company, Inc.  
Address: 775 Manchester Avenue, Wabash, Indiana 46992-1420  
Permit Number: SSM 169-32985-00003 & SPM 169-33227-00003  
Reviewer: David Matousek  
Date: May 20, 2013**

Sand Handling Unit #6				Throughput 63.00				Baghouse H
Pollutant	Emission Factor	PTE (lb/hr)	PTE (TPY)	Control Efficiency	Controlled PTE (lb/hr)	Controlled PTE (TPY)	Limited PTE (TPY)	Comments
PM	3.6 lb/ton	226.800	993.38	99.00%	2.268	9.93	(a) below	SCC# 3-04-003-15
PM <sub>10</sub>	0.54 lb/ton	34.020	149.01	99.00%	0.34	1.49		SCC# 3-04-003-15
PM <sub>2.5</sub>	0.54 lb/ton	34.020	149.01	99.00%	0.34	1.49		SCC# 3-04-003-15
Lead	0.0112104 lb/ton	0.706	3.09	98.00%	0.014	0.06	(b) below	Source analysis: lead content is 6.41% of PM emissions

(a) Combined PM, PM<sub>10</sub> and PM<sub>2.5</sub> emissions from Unit #6 are each limited to 3.42 lb/hr or 14.98 TPY  
(b) Combined lead emissions from Unit #6 are each limited to 0.034 lb/hr or 0.15 TPY

Shakeout Unit #6				Throughput 4.0975				Baghouse H
Pollutant	Emission Factor	PTE (lb/hr)	PTE (TPY)	Control Efficiency	Controlled PTE (lb/hr)	Controlled PTE (TPY)	Limited PTE (TPY)	Comments
PM	3.20 lb/ton	13.112	57.43	99.00%	0.131	0.57	(a) above	SCC# 3-04-003-03
PM <sub>10</sub>	2.24 lb/ton	9.178	40.20	99.00%	0.092	0.40		SCC# 3-04-003-03
PM <sub>2.5</sub>	2.24 lb/ton	9.178	40.20	99.00%	0.092	0.40		SCC# 3-04-003-03
VOC	1.2 lb/ton	4.917	21.54	0.00%	4.917	21.54	21.54	
Lead	0.0099648 lb/ton	0.041	0.18	98.00%	0.001	0.004	0.18	Source analysis: lead content is 6.41% of PM emissions

Sand Handling Unit #20				Throughput 45.00				Baghouse KK
Pollutant	Emission Factor	PTE (lb/hr)	PTE (TPY)	Control Efficiency	Controlled PTE (lb/hr)	Controlled PTE (TPY)	Limited PTE (TPY)	Comments
PM	3.6 lb/ton	162.000	709.56	99.00%	1.62	7.10	(c) below	SCC# 3-04-003-15
PM <sub>10</sub>	0.54 lb/ton	24.300	106.43	99.00%	0.243	1.06		SCC# 3-04-003-15
PM <sub>2.5</sub>	0.54 lb/ton	24.300	106.43	99.00%	0.243	1.06		SCC# 3-04-003-15
Lead	0.0112104 lb/ton	0.504	2.21	98.00%	0.01	0.04	(d) below	Source analysis: lead content is 6.41% of PM emissions

(c) Combined PM, PM<sub>10</sub> and PM<sub>2.5</sub> emissions from Unit #20 are each limited to 3.42 lb/hr or 14.98 TPY  
(d) Combined lead emissions from Unit #20 are each limited to 0.034 lb/hr or 0.15 TPY

**Technical Support Document - Appendix A**  
**Potential to Emit Calculations**  
**Sand Handling and Shakeout Operations**  
**(Continued)**

Shakeout Unit #20				Throughput		4.0975		Baghouse KK	
Pollutant	Emission Factor	PTE (lb/hr)	PTE (TPY)	Control Efficiency	Controlled PTE (lb/hr)	Controlled PTE (TPY)	Limited PTE (TPY)	Comments	
PM	3.20 lb/ton	13.112	57.43	99.00%	0.131	0.57	(c) previous sheet	SCC# 3-04-003-03	
PM <sub>10</sub>	2.24 lb/ton	9.178	40.20	99.00%	0.092	0.40		SCC# 3-04-003-03	
PM <sub>2.5</sub>	2.24 lb/ton	9.178	40.20	99.00%	0.092	0.40		SCC# 3-04-003-03	
VOC	1.2 lb/ton	4.917	21.54	0.00%	4.917	21.54	21.54		
Lead	0.0099648 lb/ton	0.041	0.18	98.00%	0.001	0.004	(d) previous	Source analysis: lead content is 6.41% of PM emissions	

Sand Handling Unit #13				Throughput		15.00		Baghouse T	
Pollutant	Emission Factor	PTE (lb/hr)	PTE (TPY)	Control Efficiency	Controlled PTE (lb/hr)	Controlled PTE (TPY)	Limited PTE (TPY)	Comments	
PM	3.6 lb/ton	54.000	236.52	99.00%	0.54	2.37	9.99	SCC# 3-04-003-15	
PM <sub>10</sub>	0.54 lb/ton	8.100	35.48	99.00%	0.081	0.35	9.99	SCC# 3-04-003-15	
PM <sub>2.5</sub>	0.54 lb/ton	8.100	35.48	99.00%	0.081	0.35	9.99	SCC# 3-04-003-15	
Lead	0.0072 lb/ton	0.108	0.47	98.00%	0.002	0.01	0.04	Source analysis: lead content is 6.41% of PM emissions	

Didion Rotary Metal Reclaimer				Throughput		2.0000		Baghouse G	
Pollutant	Emission Factor	PTE (lb/hr)	PTE (TPY)	Control Efficiency	Controlled PTE (lb/hr)	Controlled PTE (TPY)	Limited PTE (TPY)	Comments	
PM	3.20 lb/ton	6.40	28.03	99.00%	0.064	0.28	4.99	SCC# 3-04-003-03	
PM <sub>10</sub>	2.24 lb/ton	4.48	19.62	99.00%	0.045	0.20	4.99	SCC# 3-04-003-03	
PM <sub>2.5</sub>	2.24 lb/ton	4.48	19.62	99.00%	0.045	0.20	4.99	SCC# 3-04-003-03	
VOC	1.2 lb/ton	2.40	10.51	0.00%	2.4	10.51	10.51	SCC# 3-04-003-03	
Lead	0.0064 lb/ton	0.013	0.06	98.00%	2.60E-04	0.001	0.06	Source analysis: lead content is 6.41% of PM emissions	

**Notes:**

- 1) PM<sub>2.5</sub> is assumed to equal PM<sub>10</sub>
- 2) The source cannot run the box induction furnace and the crucible induction furnace at the same time.
- 3) The CO and Total Organic HAPs emission factors include pouring, cooling and shakeout processes.
- 4) Charging (8 furnaces) and Melting for Unit #23 include: 6 Channel Induction Furnaces (1.25 ton/hr, each), 1 Box Induction Furnace (0.695 ton/hr) 1 Crucible Furnace (0.53 ton/hr).
- 5) Pouring and Casting for Unit #23 (7 Lines) include: #1 Handline, Sinto #1, Sinto #2, Sinto #3, Sinto #4, Harrison #1, and Harrison #2
- 6) Emission factor is from "Organic Hazardous Air Pollutant Emission Factors for Iron Foundries," James Schifo, American Foundry Society, June 17, 2007 (Phenolic Hot Box Cores)
- 7) CO emission factor from an August 11, 2006 memmo from the Indiana Cast Metals Association.

**Methodology:**

- 1) Emissions (lb/hr) = Throughput (ton/hr) x Emission Factor (lb/ton)
- 2) Emissions (TPY) = Emissions (lb/hr) x 8,760 hr/yr x 1 ton / 2,000 lb
- 3) Controlled Emissions (lb/hr) = Emissions (lb/hr) x (1 - control efficiency)
- 4) Controlled Emissions (TPY) = Emissions (TPY) x (1 - control efficiency)
- 5) Limited PTE (TPY) is based on permit limit or rule limit.

**Technical Support Document - Appendix A  
Potential to Emit Calculations  
Core Making Operation**

**Company Name: The Ford Meter Box Company, Inc.  
Address: 775 Manchester Avenue, Wabash, Indiana 46992-1420  
Permit Number: SSM 169-32985-00003 & SPM 169-33227-00003  
Reviewer: David Matousek  
Date: May 20, 2013**

Warm Box Sand - Unit #19 / 13 Units (Metal)				Throughput			8.195	Uncontrolled
Pollutant	Emission Factor (Metal Charged)	PTE (lb/hr)	PTE (TPY)	Control Efficiency	Controlled PTE (lb/hr)	Controlled PTE (TPY)	Limited PTE (TPY)	Comments
PM	1.1 lb/ton	9.015	39.48	0.00%	9.015	39.48	39.48	SCC # 3-04-003-19
PM <sub>10</sub>	0.9 lb/ton	7.376	32.30	0.00%	7.376	32.30	32.30	SCC # 3-04-003-53
PM <sub>2.5</sub>	0.9 lb/ton	7.376	32.3	0.00%	7.376	32.30	32.30	SCC # 3-04-003-53
NOx	0.5 lb/ton	4.098	17.95	0.00%	4.098	17.95	17.95	SCC # 3-04-003-71

Warm Box Sand - Unit #19 / 13 Units (Sand)				Throughput			2.068	Uncontrolled
Pollutant	Emission Factor (Sand Handled)	PTE (lb/hr)	PTE (TPY)	Control Efficiency	Controlled PTE (lb/hr)	Controlled PTE (TPY)	Limited PTE (TPY)	Comments
SO <sub>2</sub>	0.038 lb/ton	0.079	0.34	0.00%	0.079	0.34	0.34	SCC # 3-04-003-51
VOC	0.343525 lb/ton	0.710	3.11	0.00%	0.71	3.11	3.11	Manufacturer Test Result
Formaldehyde	0.0112 lb/ton	0.023	0.1	0.00%	0.023	0.10	0.10	Manufacturer Test Result
Ethylene Glycol	0.42 lb/ton	0.869	3.8	0.00%	0.869	3.80	3.80	Manufacturer Test Result
Phenol	0.00056 lb/ton	0.001	0.004	0.00%	0.001	0.004	0.01	Manufacturer Test Result
Methanol	0.00875 lb/ton	0.018	0.08	0.00%	0.018	0.08	0.08	Manufacturer Test Result
Total HAP		0.91	3.98	0.00%	0.91	3.98	3.98	Sum of Individual HAP

**Notes:**

- PM<sub>2.5</sub> is assumed to equal PM<sub>10</sub>
- Total emissions from the core making operation include metal handling, sand handling and combustion.

**Methodology:**

- Emissions (lb/hr) = Throughput (ton/hr) x Emission Factor (lb/ton)
- Emissions (TPY) = Emissions (lb/hr) x 8,760 hr/yr x 1 ton / 2,000 lb
- Controlled Emissions (TPY) = Emissions (TPY) x (1 - control efficiency)
- Limited PTE (TPY) is based on permit limit or rule limit.
- Gas throughput (MMCF/year) = MMBtu/hr x 8,760 hr/yr x 1 / Heat Content (MMBtu/MMCF)
- Potential Emissions (TPY) = Emission Factor (lb/MMCF) x Usage (MMCF/yr) x 1 ton/2,000 lb
- Potential Emissions (TPY) = Emission Factor (kg/MMBtu) x 2.2046 lb/kg x Heat Input (MMBtu/hr) x 4.38 ton-hr/lb-year
- PTE (CO<sub>2</sub>e) = PTE CO<sub>2</sub> + (PTE CH<sub>4</sub> x 21) + (PTE N<sub>2</sub>O x 310)
- Global warming potentials are from Table A-1 of 40 CFR 98, Subpart A

**Technical Support Document - Appendix A**  
**Potential to Emit Calculations**  
**Core Making Operation**  
**(Continued)**

Heat Input Capacity	2.464	MMBtu/hr
Higher Heating Value	1,020	MMBtu/MMCF
Natural Gas Usage	21.16	MMCF/year

Unit #19 Combustion Emissions							
Pollutant	Emission Factor		PTE (TPY)	Control Efficiency	Controlled PTE (TPY)	Limited PTE (TPY)	Comments
PM	1.9	lb/MMCF	0.02	0.00%	0.02	0.02	AP-42, Ch 1.4, Table 1.4-2, 7/98
PM10 (filterable + condensible)	7.6	lb/MMCF	0.08	0.00%	0.08	0.08	AP-42, Ch 1.4, Table 1.4-2, 7/98
PM2.5 (filterable + condensible)	7.6	lb/MMCF	0.08	0.00%	0.08	0.08	AP-42, Ch 1.4, Table 1.4-2, 7/98
SO2	0.6	lb/MMCF	0.01	0.00%	0.01	0.01	AP-42, Ch 1.4, Table 1.4-2, 7/98
NOx	100	lb/MMCF	1.06	0.00%	1.06	1.06	AP-42, Ch 1.4, Table 1.4-2, 7/98
VOC	5.5	lb/MMCF	0.06	0.00%	0.06	0.06	AP-42, Ch 1.4, Table 1.4-2, 7/98
CO	84	lb/MMCF	0.89	0.00%	0.89	0.89	AP-42, Ch 1.4, Table 1.4-2, 7/98
Hexane	1.8	lb/MMCF	0.02	0.00%	0.02	0.02	AP-42, Ch 1.4, Table 1.4-3, 7/98
Benzene	2.10E-03	lb/MMCF	2.22E-05	0.00%	2.22E-05	2.22E-05	AP-42, Ch 1.4, Table 1.4-3, 7/98
Dichlorobenzene	1.20E-03	lb/MMCF	1.27E-05	0.00%	1.27E-05	1.27E-05	AP-42, Ch 1.4, Table 1.4-3, 7/98
Formaldehyde	7.50E-02	lb/MMCF	7.94E-04	0.00%	7.94E-04	7.94E-04	AP-42, Ch 1.4, Table 1.4-3, 7/98
Toluene	3.40E-03	lb/MMCF	3.60E-05	0.00%	3.60E-05	3.60E-05	AP-42, Ch 1.4, Table 1.4-3, 7/98
Lead	5.00E-04	lb/MMCF	5.29E-06	0.00%	5.29E-06	5.29E-06	AP-42, Ch 1.4, Table 1.4-3, 7/98
Cadmium	1.10E-03	lb/MMCF	1.16E-05	0.00%	1.16E-05	1.16E-05	AP-42, Ch 1.4, Table 1.4-3, 7/98
Chromium	1.40E-03	lb/MMCF	1.48E-05	0.00%	1.48E-05	1.48E-05	AP-42, Ch 1.4, Table 1.4-3, 7/98
Manganese	3.80E-04	lb/MMCF	4.02E-06	0.00%	4.02E-06	4.02E-06	AP-42, Ch 1.4, Table 1.4-3, 7/98
Nickel	2.10E-03	lb/MMCF	2.22E-05	0.00%	2.22E-05	2.22E-05	AP-42, Ch 1.4, Table 1.4-3, 7/98
Total HAP			0.02	0.00%	0.02	0.02	Sum of Individual HAP
CO <sub>2</sub>	53.02	kg/MMBtu	1,261	0.00%	1,261	1,261	40 CFR 98, Subpart C, Table C-1
CH <sub>4</sub>	1.00E-03	kg/MMBtu	2.38E-02	0.00%	2.38E-02	2.38E-02	40 CFR 98, Subpart C, Table C-2
N <sub>2</sub> O	1.00E-04	kg/MMBtu	2.38E-03	0.00%	2.38E-03	2.38E-03	40 CFR 98, Subpart C, Table C-2
CO <sub>2</sub> e			1,262		1,262	1,262	calculated from individual parts

**Technical Support Document - Appendix A  
Potential to Emit Calculations  
Iron Room - Shot Blasting - Cutoff**

**Company Name: The Ford Meter Box Company, Inc.  
Address: 775 Manchester Avenue, Wabash, Indiana 46992-1420  
Permit Number: SSM 169-32985-00003 & SPM 169-33227-00003  
Reviewer: David Matousek  
Date: May 20, 2013**

Iron Room - Grinding / Finishing - Unit #5				Throughput 0.780				Individual Point of Use Fabric Filters	
Pollutant	Emission Factor (Ton Charged)	PTE (lb/hr)	PTE (TPY)	Control Efficiency	Controlled PTE (lb/hr)	Controlled PTE (TPY)	Limited PTE (TPY)	Emission Factor Source / Notes	
PM	5.16 lb/ton	4.025	17.63	99.00%	0.04	0.18	15.19	Based on Stack Test, Baghouse V	
PM <sub>10</sub>	1.70 lb/ton	1.326	5.81	99.00%	0.013	0.06	5.81	SCC# 3-04-003-40	
PM <sub>2.5</sub>	1.70 lb/ton	1.326	5.81	99.00%	0.013	0.06	5.81	SCC# 3-04-003-40	
Lead	0.02 lb/ton	0.016	0.07	98.00%	3.20E-04	1.40E-03	0.07	Source Testing, Lead is 0.43% of PM	

Shot Blasting - Unit 11				Throughput 2.730				Baghouse Q	
Pollutant	Emission Factor (Ton Charged)	PTE (lb/hr)	PTE (TPY)	Control Efficiency	Controlled PTE (lb/hr)	Controlled PTE (TPY)	Limited PTE (TPY)	Emission Factor Source / Notes	
PM	17.0 lb/ton	46.410	203.28	99.00%	0.464	2.03	4.99	SCC# 3-04-003-40	
PM <sub>10</sub>	1.7 lb/ton	4.641	20.33	99.00%	0.046	0.20	4.99	SCC# 3-04-003-40	
PM <sub>2.5</sub>	1.7 lb/ton	4.641	20.33	99.00%	0.046	0.20	4.99	SCC# 3-04-003-40	
Lead	0.51 lb/ton	1.392	6.10	98.00%	0.02784	0.12	0.52	Brass is 60% of PM, Lead 5% of Brass	

Shot Blasting - Unit 12				Throughput 1.370				Baghouse S	
Pollutant	Emission Factor (Ton Charged)	PTE (lb/hr)	PTE (TPY)	Control Efficiency	Controlled PTE (lb/hr)	Controlled PTE (TPY)	Limited PTE (TPY)	Emission Factor Source / Notes	
PM	17.0 lb/ton	23.290	102.01	99.00%	0.233	1.02	2.01	SCC# 3-04-003-40	
PM <sub>10</sub>	1.7 lb/ton	2.329	10.20	99.00%	0.023	0.10	2.01	SCC# 3-04-003-40	
PM <sub>2.5</sub>	1.7 lb/ton	2.329	10.20	99.00%	0.023	0.10	2.01	SCC# 3-04-003-40	
Lead	0.51 lb/ton	0.699	3.06	98.00%	0.01398	0.06	0.26	Brass is 60% of PM, Lead 5% of Brass	

Shot Blasting - Unit 14				Throughput 8.195				Baghouse S	
Pollutant	Emission Factor (Ton Charged)	PTE (lb/hr)	PTE (TPY)	Control Efficiency	Controlled PTE (lb/hr)	Controlled PTE (TPY)	Limited PTE (TPY)	Emission Factor Source / Notes	
PM	17.0 lb/ton	139.315	610.20	99.00%	1.393	6.10	14.98	SCC# 3-04-003-40	
PM <sub>10</sub>	1.7 lb/ton	13.932	61.02	99.00%	0.139	0.61	14.98	SCC# 3-04-003-40	
PM <sub>2.5</sub>	1.7 lb/ton	13.932	61.02	99.00%	0.139	0.61	14.98	SCC# 3-04-003-40	
Lead	0.03 lb/ton	0.246	1.08	98.00%	0.0049	0.02	0.08	Brass is 3% of PM, Lead 5% of Brass	

See Next Sheet for Methodology

**Technical Support Document - Appendix A  
Potential to Emit Calculations  
Iron Room - Shot Blasting - Cutoff**

Shot Blasting - Unit #29				Throughput		2.000		Baghouse	
Pollutant	Emission Factor (Ton Charged)	PTE (lb/hr)	PTE (TPY)	Control Efficiency	Controlled PTE (lb/hr)	Controlled PTE (TPY)	Limited PTE (TPY)	Emission Factor Source / Notes	
PM	17.0 lb/ton	34.000	148.92	99.00%	0.34	1.49	4.99	SCC# 3-04-003-40	
PM <sub>10</sub>	1.7 lb/ton	3.400	14.89	99.00%	0.034	0.15	4.99	SCC# 3-04-003-40	
PM <sub>2.5</sub>	1.7 lb/ton	3.400	14.89	99.00%	0.034	0.15	4.99	SCC# 3-04-003-40	
Lead	0.04 lb/ton	0.080	0.35	98.00%	0.0016	0.01	0.10	Source Analysis	

Cutoff Operations - Unit #15				Throughput		8.195		Baghouse V	
Pollutant	Emission Factor (Ton Charged)	PTE (lb/hr)	PTE (TPY)	Control Efficiency	Controlled PTE (lb/hr)	Controlled PTE (TPY)	Limited PTE (TPY)	Emission Factor Source / Notes	
PM	5.16 lb/ton	42.286	185.21	99.00%	0.423	1.85	14.98	Stack Test, Baghouse V	
PM <sub>10</sub>	1.70 lb/ton	13.932	61.02	99.00%	0.139	0.61	14.98	SCC# 3-04-003-40	
PM <sub>2.5</sub>	1.70 lb/ton	13.932	61.02	99.00%	0.139	0.61	14.98	SCC# 3-04-003-40	
Lead	0.25 lb/ton	2.049	8.97	98.00%	0.04098	0.18	1.50	Stack Test, Baghouse V	

Cutoff Saw - Unit #30				Throughput		2.000		Baghouse	
Pollutant	Emission Factor (Ton Charged)	PTE (lb/hr)	PTE (TPY)	Control Efficiency	Controlled PTE (lb/hr)	Controlled PTE (TPY)	Limited PTE (TPY)	Emission Factor Source / Notes	
PM	17.00 lb/ton	34.000	148.92	99.00%	0.34	1.49	4.99	SCC# 3-04-003-40	
PM <sub>10</sub>	1.70 lb/ton	3.400	14.89	99.00%	0.034	0.15	4.99	SCC# 3-04-003-40	
PM <sub>2.5</sub>	1.70 lb/ton	3.400	14.89	99.00%	0.034	0.15	4.99	SCC# 3-04-003-40	
Lead	0.04 lb/ton	0.080	0.35	98.00%	0.0016	0.01	0.10	No-lead Brass < 0.25% lead	

**Notes:**

- 1) PM<sub>2.5</sub> is assumed to equal PM<sub>10</sub>
- 2) Total emissions from the core making operation include metal handling, sand handling and combustion.

**Methodology:**

- 1) Emissions (lb/hr) = Throughput (ton/hr) x Emission Factor (lb/ton)
- 2) Emissions (TPY) = Emissions (lb/hr) x 8,760 hr/yr x 1 ton / 2,000 lb
- 3) Controlled Emissions (TPY) = Emissions (TPY) x (1 - control efficiency)
- 4) Limited PTE (TPY) is based on permit limit or rule limit.

**Technical Support Document - Appendix A  
Potential to Emit Calculations  
Machining, Grinding and Finishing**

**Company Name: The Ford Meter Box Company, Inc.  
Address: 775 Manchester Avenue, Wabash, Indiana 46992-1420  
Permit Number: SSM 169-32985-00003 & SPM 169-33227-00003  
Reviewer: David Matousek  
Date: May 20, 2013**

Machining, Grinding, and Polishing - Unit #16				Throughput	0.780	Baghouse W			
Pollutant	Emission Factor (Ton Charged)	PTE (lb/hr)	PTE (TPY)	Control Efficiency	Controlled PTE (lb/hr)	Controlled PTE (TPY)	Limited PTE (TPY)	Emission Factor Source / Notes	
PM	17 lb/ton	13.260	58.08	99.00%	0.133	0.58	2.98	SCC# 3-04-003-40	
PM <sub>10</sub>	1.7 lb/ton	1.326	5.81	99.00%	0.013	0.06	2.98	SCC# 3-04-003-40	
PM <sub>2.5</sub>	1.7 lb/ton	1.326	5.81	99.00%	0.013	0.06	2.98	SCC# 3-04-003-40	
Lead	0.84 lb/ton	0.655	2.87	98.00%	0.01310	0.06	0.25	Source Testing, Lead is 0.43% of PM	

Machining, Grinding, and Polishing - Unit #17				Throughput	2.131	Baghouse X, Filtermist			
Pollutant	Emission Factor (Ton Charged)	PTE (lb/hr)	PTE (TPY)	Control Efficiency	Controlled PTE (lb/hr)	Controlled PTE (TPY)	Limited PTE (TPY)	Emission Factor Source / Notes	
<b>Dry Processing</b>									
PM	17.0 lb/ton	36.227	158.67	99.00%	0.362	1.59	9.99	SCC# 3-04-003-40	
PM <sub>10</sub>	1.7 lb/ton	3.623	15.87	99.00%	0.036	0.16	9.99	SCC# 3-04-003-40	
PM <sub>2.5</sub>	1.7 lb/ton	3.623	15.87	99.00%	0.036	0.16	9.99	SCC# 3-04-003-40	
Lead	0.84 lb/ton	1.790	7.84	98.00%	0.0358	0.16	1.34	Source Testing	
<b>Wet Processing</b>									
PM	0.127 lb/ton	0.271	1.19	99.00%	0.003	0.01	NA	Outlet Loading, 18 mg/m3, 2,000 SCFM	
PM <sub>10</sub>	0.127 lb/ton	0.271	1.19	99.00%	0.003	0.01	NA	Outlet Loading, 18 mg/m3, 2,000 SCFM	
PM <sub>2.5</sub>	0.127 lb/ton	0.271	1.19	99.00%	0.003	0.01	NA	Outlet Loading, 18 mg/m3, 2,000 SCFM	
Lead	0 lb/ton	0.000	0.00	98.00%	0.00	0.00	NA	Source Testing	

**Notes:**

- 1) PM<sub>2.5</sub> is assumed to equal PM<sub>10</sub>
- 2) Total emissions from the core making operation include metal handling, sand handling and combustion.

**Methodology:**

- 1) Emissions (lb/hr) = Throughput (ton/hr) x Emission Factor (lb/ton)
- 2) Emissions (TPY) = Emissions (lb/hr) x 8,760 hr/yr x 1 ton / 2,000 lb
- 3) Controlled Emissions (TPY) = Emissions (TPY) x (1- control efficiency)
- 4) Limited PTE (TPY) is based on permit limit or rule limit.

**Technical Support Document - Appendix A  
Potential to Emit Calculations  
Machining, Grinding and Finishing  
(Continued)**

Machining, Grinding, and Polishing - Unit #18				Throughput	0.900	Baghouse Y, Filtermist			
Pollutant	Emission Factor (Ton Charged)	PTE (lb/hr)	PTE (TPY)	Control Efficiency	Controlled PTE (lb/hr)	Controlled PTE (TPY)	Limited PTE (TPY)	Emission Factor Source / Notes	
<b>Dry Processing</b>									
PM	17.0 lb/ton	15.300	67.01	99.00%	0.153	0.67	2.98	SCC# 3-04-003-40	
PM <sub>10</sub>	1.7 lb/ton	1.530	6.70	99.00%	0.015	0.07	2.98	SCC# 3-04-003-40	
PM <sub>2.5</sub>	1.7 lb/ton	1.530	6.70	99.00%	0.015	0.07	2.98	SCC# 3-04-003-40	
Lead	0.84 lb/ton	0.756	3.31	98.00%	0.01512	0.07	0.28	Source Testing	
<b>Wet Processing</b>									
PM	0.180 lb/ton	0.162	0.71	99.50%	0.001	0.00	NA	Outlet loading, 18 mg/m3, 1,200 SCFM	
PM <sub>10</sub>	0.180 lb/ton	0.162	0.71	99.50%	0.001	0.00	NA	Outlet loading, 18 mg/m3, 1,200 SCFM	
PM <sub>2.5</sub>	0.180 lb/ton	0.162	0.71	99.50%	0.001	0.00	NA	Outlet loading, 18 mg/m3, 1,200 SCFM	
Lead	0 lb/ton	0.000	0.00	98.00%	0.00	0.00	NA	Not used for product containing lead.	

Machining, Grinding, and Polishing - Unit #26				Throughput	2.238	Baghouse BC, Filtermist			
Pollutant	Emission Factor (Ton Charged)	PTE (lb/hr)	PTE (TPY)	Control Efficiency	Controlled PTE (lb/hr)	Controlled PTE (TPY)	Limited PTE (TPY)	Emission Factor Source / Notes	
<b>Dry Processing</b>									
PM	17.0 lb/ton	38.046	166.64	99.00%	0.38	1.67	9.99	SCC# 3-04-003-40	
PM <sub>10</sub>	1.7 lb/ton	3.805	16.67	99.00%	0.038	0.17	9.99	SCC# 3-04-003-40	
PM <sub>2.5</sub>	1.7 lb/ton	3.805	16.67	99.00%	0.038	0.17	9.99	SCC# 3-04-003-40	
Lead	0.84 lb/ton	1.880	8.23	98.00%	0.03760	0.16460	1.34	Source Testing	
<b>Wet Processing</b>									
PM	0.211 lb/ton	0.472	2.07	99.00%	0.005	0.02	NA	Outlet Loading, 18 mg/m3, 3,500 SCFM	
PM <sub>10</sub>	0.211 lb/ton	0.472	2.07	99.00%	0.005	0.02	NA	Outlet Loading, 18 mg/m3, 3,500 SCFM	
PM <sub>2.5</sub>	0.211 lb/ton	0.472	2.07	99.00%	0.005	0.02	NA	Outlet Loading, 18 mg/m3, 3,500 SCFM	
Lead	0.000 lb/ton	0.000	0.00	98.00%	0.00	0.00	NA	Source Testing	

**Notes:**

- 1) PM<sub>2.5</sub> is assumed to equal PM<sub>10</sub>
- 2) Total emissions from the core making operation include metal handling, sand handling and combustion.

**Methodology:**

- 1) Emissions (lb/hr) = Throughput (ton/hr) x Emission Factor (lb/ton)
- 2) Emissions (TPY) = Emissions (lb/hr) x 8,760 hr/yr x 1 ton / 2,000 lb
- 3) Controlled Emissions (TPY) = Emissions (TPY) x (1- control efficiency)
- 4) Limited PTE (TPY) is based on permit limit or rule limit.

**Technical Support Document - Appendix A**  
**Potential to Emit Calculations**  
**100 KW Natural Gas Fired Emergency Generator - 4 Stroke Lean Burn**

**Company Name:** The Ford Meter Box Company, Inc.  
**Address:** 775 Manchester Avenue, Wabash, Indiana 46992-1420  
**Permit Number:** SSM 169-32985-00003 & SPM 169-33227-00003  
**Reviewer:** David Matousek  
**Date:** May 20, 2013

**Design Data**

Heat Input Capacity	1.15 MMBtu/hr		
HHV Natural Gas	1,020 MMBtu/MMCF		
Unlimited Operating Hours	500 hr/yr	575.00 MMBtu/yr	0.56 MMCF/yr
Limited Operating Hours	500 hr/yr	575.00 MMBtu/yr	0.56 MMCF/yr

Pollutant	Emission Factor		PTE (TPY)	Limited PTE (TPY)	Data Source
PM	7.71E-05	lb/MMBtu	2.22E-05	2.22E-05	AP-42, Table 3.2-2, July 2000, 4SLB
PM <sub>10</sub> (filterable + condensable)	9.91E-03	lb/MMBtu	0.00	0.00	AP-42, Table 3.2-2, July 2000, 4SLB
PM <sub>2.5</sub> (filterable + condensable)	9.91E-03	lb/MMBtu	0.00	0.00	AP-42, Table 3.2-2, July 2000, 4SLB
SO <sub>2</sub>	5.88E-04	lb/MMBtu	1.69E-04	1.69E-04	AP-42, Table 3.2-2, July 2000, 4SLB
NO <sub>x</sub>	4.08	lb/MMBtu	1.17	1.17	AP-42, Table 3.2-2, July 2000, 4SLB
VOC	1.18E-01	lb/MMBtu	0.03	0.03	AP-42, Table 3.2-2, July 2000, 4SLB
CO	3.17E-01	lb/MMBtu	0.09	0.09	AP-42, Table 3.2-2, July 2000, 4SLB
Acetaldehyde	8.36E-03	lb/MMBtu	0.00	0.00	AP-42, Table 3.2-2, July 2000, 4SLB
Acrolein	5.14E-03	lb/MMBtu	0.00	0.00	AP-42, Table 3.2-2, July 2000, 4SLB
Benzene	4.40E-04	lb/MMBtu	1.27E-04	1.27E-04	AP-42, Table 3.2-2, July 2000, 4SLB
Biphenyl	2.12E-04	lb/MMBtu	6.10E-05	6.10E-05	AP-42, Table 3.2-2, July 2000, 4SLB
1,3-Butadiene	2.67E-04	lb/MMBtu	7.68E-05	7.68E-05	AP-42, Table 3.2-2, July 2000, 4SLB
Formaldehyde	5.28E-02	lb/MMBtu	0.02	0.02	AP-42, Table 3.2-2, July 2000, 4SLB
Methanol	2.50E-03	lb/MMBtu	0.00	0.00	AP-42, Table 3.2-2, July 2000, 4SLB
Hexane	1.10E-03	lb/MMBtu	3.16E-04	3.16E-04	AP-42, Table 3.2-2, July 2000, 4SLB
Toluene	4.08E-04	lb/MMBtu	1.17E-04	1.17E-04	AP-42, Table 3.2-2, July 2000, 4SLB
2,2,4-Trimethylpentane	2.50E-04	lb/MMBtu	7.19E-05	7.19E-05	AP-42, Table 3.2-2, July 2000, 4SLB
Xylene	1.84E-04	lb/MMBtu	5.29E-05	5.29E-05	AP-42, Table 3.2-2, July 2000, 4SLB
Total HAP			0.02	0.02	Sum of Individual HAPs
CO <sub>2</sub>	53.02	kg/MMBtu	34	34	40 CFR 98, Table C-1, December 17, 2010
CH <sub>4</sub>	1.00E-03	kg/MMBtu	6.34E-04	6.34E-04	40 CFR 98, Table C-2, December 17, 2010
N <sub>2</sub> O	1.00E-04	kg/MMBtu	6.34E-05	6.34E-05	40 CFR 98, Table C-2, December 17, 2010
GHG as CO <sub>2</sub> e			34	34	

**Methodology:**

- 1) Annual Heat Input (MMBtu/yr) = Heat Input (MMBtu/hr) x Operating Hours (hr/yr)
- 2) Natural Gas Usage (MMCF/yr) = Heat Input (MMBtu/yr) x 1 / 1,020 MMBtu/MMCF
- 3) Limited PTE/PTE (TPY) = Annual Heat Input (MMBtu/yr) x Emission Factor (lb/MMBtu) x (1 ton / 2,000 lb)
- 4) Limited PTE/PTE (TPY) = Annual Heat Input (MMBtu/yr) x Emission Factor (kg/MMBtu) x 2.2046 lb/kg x (1 ton / 2,000 lb)
- 5) GHG as CO<sub>2</sub>e (TPY) = (CO<sub>2</sub> emissions) + (CH<sub>4</sub> emissions x 21) + (N<sub>2</sub>O emissions x 310)

**Technical Support Document - Appendix A**  
**Potential to Emit Calculations**  
**Two Diesel-Fired Emergency Generators**

**Company Name:** The Ford Meter Box Company, Inc.  
**Address:** 775 Manchester Avenue, Wabash, Indiana 46992-1420  
**Permit Number:** SSM 169-32985-00003 & SPM 169-33227-00003  
**Reviewer:** David Matousek  
**Date:** May 20, 2013

**Design Data**

Engine Output	846 Hp	(423 HP, Each)		
Brake Specific Fuel Consumption	7,000 Btu/hp-hr	(AP-42, Ch 3.3, Table 3.3-1, Note c, 10/1996)		
Heat Input	5.92 MMBtu/hr			
HHV Diesel	140 MMBtu/kgal			
Unlimited Hours	500 hr/yr	21.14 kgal/yr	2,960.00 MMBtu/yr	
Limited Hours	500 hr/yr	21.14 kgal/yr	2,960.00 MMBtu/yr	

Pollutant	Emission Factor		PTE (TPY)	Limited PTE (TPY)	Data Source
PM	2.20E-03	lb/hp-hr	0.47	0.47	Same as PM <sub>10</sub>
PM <sub>10</sub> (filterable + condensible)	2.20E-03	lb/hp-hr	0.47	0.47	AP-42, Ch 3.3, Table 3.3-1, 10/1996
PM <sub>2.5</sub> (filterable + condensible)	2.20E-03	lb/hp-hr	0.47	0.47	Same as PM <sub>10</sub>
SO <sub>2</sub>	2.05E-03	lb/hp-hr	0.43	0.43	AP-42, Ch 3.3, Table 3.3-1, 10/1996
NO <sub>x</sub>	0.031	lb/hp-hr	6.56	6.56	AP-42, Ch 3.3, Table 3.3-1, 10/1996
VOC	2.51E-03	lb/hp-hr	0.53	0.53	AP-42, Ch 3.3, Table 3.3-1, 10/1996 (TOC)
CO	6.68E-03	lb/hp-hr	1.41	1.41	AP-42, Ch 3.3, Table 3.3-1, 10/1996
Benzene	9.33E-04	lb/MMBtu	1.38E-03	1.38E-03	AP-42, Ch 3.3, Table 3.3-2, 10/1996
Toluene	4.09E-04	lb/MMBtu	6.05E-04	6.05E-04	AP-42, Ch 3.3, Table 3.3-2, 10/1996
Xylene	2.85E-04	lb/MMBtu	4.22E-04	4.22E-04	AP-42, Ch 3.3, Table 3.3-2, 10/1996
1,3-Butadiene	3.91E-05	lb/MMBtu	5.79E-05	5.79E-05	AP-42, Ch 3.3, Table 3.3-2, 10/1996
Formaldehyde	1.18E-03	lb/MMBtu	1.75E-03	1.75E-03	AP-42, Ch 3.3, Table 3.3-2, 10/1996
Acetaldehyde	7.67E-04	lb/MMBtu	1.14E-03	1.14E-03	AP-42, Ch 3.3, Table 3.3-2, 10/1996
Acrolein	9.25E-05	lb/MMBtu	1.37E-04	1.37E-04	AP-42, Ch 3.3, Table 3.3-2, 10/1996
Naphthalene	8.48E-05	lb/MMBtu	1.26E-04	1.26E-04	AP-42, Ch 3.3, Table 3.3-2, 10/1996
Total HAP			0.01	0.01	Sum of Individual HAPs
CO <sub>2</sub>	73.96	kg/MMBtu	241	241	40 CFR 98, Table C-1, December 17, 2010
CH <sub>4</sub>	3.00E-03	kg/MMBtu	0.01	0.01	40 CFR 98, Table C-2, December 17, 2010
N <sub>2</sub> O	6.00E-04	kg/MMBtu	0.00	0.00	40 CFR 98, Table C-2, December 17, 2010
GHG as CO <sub>2</sub> e			241	241	See Methodology 5 Below

**Methodology:**

- 1) Annual Heat Input (MMBtu/yr) = Heat Input (MMBtu/hr) x Operating Hours (hr/yr)
- 2) Natural Gas Usage (MMCF/yr) = Heat Input (MMBtu/yr) x 1 / 1,020 MMBtu/MMCF
- 3) Limited PTE/PTE (TPY) = Annual Heat Input (MMBtu/yr) x Emission Factor (lb/MMBtu) x (1 ton / 2,000 lb)
- 4) Limited PTE/PTE (TPY) = Annual Heat Input (MMBtu/yr) x Emission Factor (kg/MMBtu) x 2.2046 lb/kg x (1 ton / 2,000 lb)
- 5) GHG as CO<sub>2</sub>e (TPY) = (CO<sub>2</sub> emissions) + (CH<sub>4</sub> emissions x 21) + (N<sub>2</sub>O emissions x 310)

**Technical Support Document - Appendix A  
Potential to Emit Calculations  
One Diesel-Fired Emergency Fire Pump**

**Company Name:** The Ford Meter Box Company, Inc.  
**Address:** 775 Manchester Avenue, Wabash, Indiana 46992-1420  
**Permit Number:** SSM 169-32985-00003 & SPM 169-33227-00003  
**Reviewer:** David Matousek  
**Date:** May 20, 2013

**Design Data**

Engine Output	100 Hp		
Brake Specific Fuel Consumption	7,000 Btu/hp-hr	(AP-42, Ch 3.3, Table 3.3-1, Note c, 10/1996)	
Heat Input	0.7 MMBtu/hr		
HHV Diesel	140 MMBtu/kgal		
Unlimited Hours	500 hr/yr	2.5 kgal/yr	350.00 MMBtu/yr
Limited Hours	500 hr/yr	2.5 kgal/yr	350.00 MMBtu/yr

Pollutant	Emission Factor		PTE (TPY)	Limited PTE (TPY)	Data Source
PM	2.20E-03	lb/hp-hr	0.06	0.06	Same as PM <sub>10</sub>
PM <sub>10</sub> (filterable + condensable)	2.20E-03	lb/hp-hr	0.06	0.06	AP-42, Ch 3.3, Table 3.3-1, 10/1996
PM <sub>2.5</sub> (filterable + condensable)	2.20E-03	lb/hp-hr	0.06	0.06	Same as PM <sub>10</sub>
SO <sub>2</sub>	2.05E-03	lb/hp-hr	0.05	0.05	AP-42, Ch 3.3, Table 3.3-1, 10/1996
NO <sub>x</sub>	0.031	lb/hp-hr	0.78	0.78	AP-42, Ch 3.3, Table 3.3-1, 10/1996
VOC	2.51E-03	lb/hp-hr	0.06	0.06	AP-42, Ch 3.3, Table 3.3-1, 10/1996 (TOC)
CO	6.68E-03	lb/hp-hr	0.17	0.17	AP-42, Ch 3.3, Table 3.3-1, 10/1996
Benzene	9.33E-04	lb/MMBtu	1.63E-04	1.63E-04	AP-42, Ch 3.3, Table 3.3-2, 10/1996
Toluene	4.09E-04	lb/MMBtu	7.16E-05	7.16E-05	AP-42, Ch 3.3, Table 3.3-2, 10/1996
Xylene	2.85E-04	lb/MMBtu	4.99E-05	4.99E-05	AP-42, Ch 3.3, Table 3.3-2, 10/1996
1,3-Butadiene	3.91E-05	lb/MMBtu	6.84E-06	6.84E-06	AP-42, Ch 3.3, Table 3.3-2, 10/1996
Formaldehyde	1.18E-03	lb/MMBtu	2.07E-04	2.07E-04	AP-42, Ch 3.3, Table 3.3-2, 10/1996
Acetaldehyde	7.67E-04	lb/MMBtu	1.34E-04	1.34E-04	AP-42, Ch 3.3, Table 3.3-2, 10/1996
Acrolein	9.25E-05	lb/MMBtu	1.62E-05	1.62E-05	AP-42, Ch 3.3, Table 3.3-2, 10/1996
Naphthalene	8.48E-05	lb/MMBtu	1.48E-05	1.48E-05	AP-42, Ch 3.3, Table 3.3-2, 10/1996
Total HAP			6.63E-04	6.63E-04	Sum of Individual HAPs
CO <sub>2</sub>	73.96	kg/MMBtu	29	29	40 CFR 98, Table C-1, December 17, 2010
CH <sub>4</sub>	3.00E-03	kg/MMBtu	1.16E-03	1.16E-03	40 CFR 98, Table C-2, December 17, 2010
N <sub>2</sub> O	6.00E-04	kg/MMBtu	2.31E-04	2.31E-04	40 CFR 98, Table C-2, December 17, 2010
GHG as CO <sub>2</sub> e			29	29	See Methodology 5 Below

**Methodology:**

- 1) Annual Heat Input (MMBtu/yr) = Heat Input (MMBtu/hr) x Operating Hours (hr/yr)
- 2) Natural Gas Usage (MMCF/yr) = Heat Input (MMBtu/yr) x 1 / 1,020 MMBtu/MMCF
- 3) Limited PTE/PTE (TPY) = Annual Heat Input (MMBtu/yr) x Emission Factor (lb/MMBtu) x (1 ton / 2,000 lb)
- 4) Limited PTE/PTE (TPY) = Annual Heat Input (MMBtu/yr) x Emission Factor (kg/MMBtu) x 2.2046 lb/kg x (1 ton / 2,000 lb)
- 5) GHG as CO<sub>2</sub>e (TPY) = (CO<sub>2</sub> emissions) + (CH<sub>4</sub> emissions x 21) + (N<sub>2</sub>O emissions x 310)

### Technical Support Document - Appendix A Potential to Emit Calculations Surface Coating Operations - PM and VOC

**Company Name: The Ford Meter Box Company, Inc.**  
**Address: 775 Manchester Avenue, Wabash, Indiana 46992-1420**  
**Permit Number: SSM 169-32985-00003 & SPM 169-33227-00003**  
**Reviewer: David Matousek**  
**Date: May 20, 2013**

Binks Teflon Coating Spray Booth - Unit #21															
Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/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
Xylan 8460	9.2	71.50%	24.6%	46.9%	27.1%	18.44%	0.00520	121.700	5.92	4.31	2.73	65.53	11.96	4.00	23.40
<b>Control Efficiency</b>													<b>0.00%</b>	<b>90.00%</b>	
<b>Controlled PTE</b>													<b>11.96</b>	<b>0.40</b>	
<b>Limited PTE</b>													<b>11.96</b>	<b>0.40</b>	

Nut Coating Operation - Unit #27															
Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/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
Emralon 8301-01	8.7	83.30%	62.0%	21.3%	62.0%	16.70%	0.00016	1960.000	4.88	1.85	0.58	13.95	2.55	0.00	11.10
<b>Control Efficiency</b>													<b>0.00%</b>	<b>0.00%</b>	
<b>Controlled PTE</b>													<b>2.55</b>	<b>0.00</b>	
<b>Limited PTE</b>													<b>2.55</b>	<b>0.00</b>	

Misc. Painting and Gluing Operations			
Potential VOC pounds per hour	Potential VOC pounds	Potential VOC tons per year	Particulate Potential (ton/yr)
2.35	56.44	10.30	2.64
<b>Control Efficiency</b>		<b>0.00%</b>	<b>99.50%</b>
<b>Controlled PTE</b>		<b>10.30</b>	<b>0.01</b>
<b>Limited PTE</b>		<b>10.30</b>	<b>2.64</b>

**METHODOLOGY**

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

**Technical Support Document - Appendix A  
Potential to Emit Calculations  
Surface Coating Operations - HAPs**

**Company Name: The Ford Meter Box Company, Inc.  
Address: 775 Manchester Avenue, Wabash, Indiana 46992-1420  
Permit Number: SSM 169-32985-00003 & SPM 169-33227-00003  
Reviewer: David Matousek  
Date: May 20, 2013**

Binks Teflon Coating Spray Booth - Unit #21												
Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Cumene	Weight % Dimethylformamide	Weight % Ethylene Glycol	Weight % Xylene	Cumene Emissions (ton/yr)	Dimethylformamide Emissions (ton/yr)	Ethylene Glycol Emissions (ton/yr)	Benzene Emissions (ton/yr)	Total HAP Emissions (ton/yr)
Xylan 8460	7.95	1.00	2.50	0.04%	1.84%	5.23%	0.03%	0.03	1.60	4.55	0.03	6.22

Nut Coating Operation - Unit #27												
Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Cumene	Weight % Dimethylformamide	Weight % Ethylene Glycol	Weight % Xylene	Cumene Emissions (ton/yr)	Dimethylformamide Emissions (ton/yr)	Ethylene Glycol Emissions (ton/yr)	Benzene Emissions (ton/yr)	Total HAP Emissions (ton/yr)
Emralon 8301-01	9.38	1.00	2.50	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00

Misc. Painting and Gluing Activities					
Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Toluene Emissions (ton/yr)	Total HAP Emissions (ton/yr)
Multiple				2.40	2.40

**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

**Technical Support Document - Appendix A**  
**Potential to Emit Calculations**  
**Three Chip Dryers, each with a thermal oxidizer**

**Company Name:** The Ford Meter Box Company, Inc.  
**Address:** 775 Manchester Avenue, Wabash, Indiana 46992-1420  
**Permit Number:** SSM 169-32985-00003 & SPM 169-33227-00003  
**Reviewer:** David Matousek  
**Date:** May 20, 2013

**Design Data - Natural Gas Combustion**

Heat Input Capacity	3.15 MMBtu/hr	(Each dryer at 0.625 MMBtu/hr, Thermal Oxidizer at 0.425 MMBtu/hr, 1.05 MMBtu/hr total)		
HHV Natural Gas	1,020 MMBtu/MMCF			
Unlimited Operating Hours	8,760 hr/yr	27,594 MMBtu/yr	27.05 MMCF/yr	
Limited Operating Hours	8,760 hr/yr	27,594 MMBtu/yr	27.05 MMCF/yr	

Pollutant	Emission Factor		PTE (TPY)	Limited PTE (TPY)	Data Source
PM	1.90	lb/MMCF	0.03	0.03	AP-42, Ch 1.4, Table 1.4-2, 7/1998
PM <sub>10</sub> (filterable + condensable)	7.60	lb/MMCF	0.10	0.10	AP-42, Ch 1.4, Table 1.4-2, 7/1998
PM <sub>2.5</sub> (filterable + condensable)	7.60	lb/MMCF	0.10	0.10	AP-42, Ch 1.4, Table 1.4-2, 7/1998
SO <sub>2</sub>	0.60	lb/MMCF	0.01	0.01	AP-42, Ch 1.4, Table 1.4-2, 7/1998
NO <sub>x</sub>	100.00	lb/MMCF	1.35	1.35	AP-42, Ch 1.4, Table 1.4-1, 7/1998
VOC	5.50	lb/MMCF	0.07	0.07	AP-42, Ch 1.4, Table 1.4-2, 7/1998
CO	84.00	lb/MMCF	1.14	1.14	AP-42, Ch 1.4, Table 1.4-1, 7/1998
2-Methylnaphthalene	2.40E-05	lb/MMCF	3.25E-07	3.25E-07	AP-42, Ch 1.4, Table 1.4-3, 7/1998
Benzene	2.10E-03	lb/MMCF	2.84E-05	2.84E-05	AP-42, Ch 1.4, Table 1.4-3, 7/1998
Dichlorobenzene	1.20E-03	lb/MMCF	1.62E-05	1.62E-05	AP-42, Ch 1.4, Table 1.4-3, 7/1998
Fluoranthene	3.00E-06	lb/MMCF	4.06E-08	4.06E-08	AP-42, Ch 1.4, Table 1.4-3, 7/1998
Fluorene	2.80E-06	lb/MMCF	3.79E-08	3.79E-08	AP-42, Ch 1.4, Table 1.4-3, 7/1998
Formaldehyde	7.50E-02	lb/MMCF	1.01E-03	1.01E-03	AP-42, Ch 1.4, Table 1.4-3, 7/1998
Hexane	1.8	lb/MMCF	2.43E-02	2.43E-02	AP-42, Ch 1.4, Table 1.4-3, 7/1998
Naphthalene	6.10E-04	lb/MMCF	8.25E-06	8.25E-06	AP-42, Ch 1.4, Table 1.4-3, 7/1998
Phenanathrene	1.70E-05	lb/MMCF	2.30E-07	2.30E-07	AP-42, Ch 1.4, Table 1.4-3, 7/1998
Pyrene	5.00E-06	lb/MMCF	6.76E-08	6.76E-08	AP-42, Ch 1.4, Table 1.4-3, 7/1998
Toluene	3.40E-03	lb/MMCF	4.60E-05	4.60E-05	AP-42, Ch 1.4, Table 1.4-3, 7/1998
Total HAP			0.03	0.03	Sum of Individual HAPs
CO <sub>2</sub>	53.02	kg/MMBtu	1,613	1,613	40 CFR 98, Subpart C, Table C-1, 12/2010
CH <sub>4</sub>	1.00E-03	kg/MMBtu	3.04E-02	3.04E-02	40 CFR 98, Subpart C, Table C-2, 12/2010
N <sub>2</sub> O	1.00E-04	kg/MMBtu	3.04E-03	3.04E-03	40 CFR 98, Subpart C, Table C-2, 12/2010
GHG as CO <sub>2</sub> e			1,615	1,615	

**Technical Support Document - Appendix A**  
**Potential to Emit Calculations**  
**Three Chip Dryers, each with a thermal oxidizer**  
**(Continued)**

**Design Data - Coolant Emissions**

Coolant Usage	2004.81 gallons/year	or	2.00 kgal/yr	280 MMBtu/yr
Limited Coolant Usage	2004.81 gallons/year		2.00 kgal/yr	280 MMBtu/yr
HHV of Coolant	140.00 MMBtu/kgal			

Pollutant	Emission Factor		PTE (TPY)	Limited PTE (TPY)	Data Source
PM	598.56	lb/kgal	0.60	0.60	Manufacturer Test Data
PM <sub>10</sub> (filterable + condensable)	598.56	lb/kgal	0.60	0.60	Manufacturer Test Data
PM <sub>2.5</sub> (filterable + condensable)	598.56	lb/kgal	0.60	0.60	Manufacturer Test Data
SO <sub>2</sub>	251.20	lb/kgal	0.25	0.25	AP-42, Ch 1.3, Table 1.3-1, 5/2010, S=1.6, No. 6
NO <sub>x</sub>	55.00	lb/kgal	0.06	0.06	AP-42, Ch 1.3, Table 1.3-1, 5/2010, No. 6
VOC	1.10	lb/kgal	1.10E-03	1.10E-03	AP-42, Ch 1.3, Table 1.3-1, 5/2010, No. 6
CO	5.00	lb/kgal	5.00E-03	5.00E-03	AP-42, Ch 1.3, Table 1.3-1, 5/2010, No. 6
Total HAP	0.0123	lb/kgal	1.23E-05	1.23E-05	Manufacturer Test Data
CO <sub>2</sub>	75.10	kg/MMBtu	23	23	40 CFR 98, Subpart C, Table C-1, 12/2010
CH <sub>4</sub>	3.00E-03	kg/MMBtu	9.26E-04	9.26E-04	40 CFR 98, Subpart C, Table C-2, 12/2010
N <sub>2</sub> O	6.00E-04	kg/MMBtu	1.85E-04	1.85E-04	40 CFR 98, Subpart C, Table C-2, 12/2010
CO <sub>2</sub> e			23	23	Calculated

Pollutant	Combustion Emissions (TPY)	Coolant Emissions (TPY)	Total PTE (TPY)	Controlled PTE (TPY)	Limited PTE (TPY)
PM	0.03	0.60	0.63	0.63	0.63
PM <sub>10</sub> (filterable + condensable)	0.10	0.60	0.70	0.70	0.70
PM <sub>2.5</sub> (filterable + condensable)	0.10	0.60	0.70	0.70	0.70
SO <sub>2</sub>	0.01	0.25	0.26	0.26	0.26
NO <sub>x</sub>	1.35	0.06	1.41	1.41	1.41
VOC	0.07	1.10E-03	0.07	0.07	0.07
CO	1.14	5.00E-03	1.15	1.15	1.15
Total HAP	0.03	1.23E-05	0.03	0.03	0.03
CO <sub>2</sub> e	1,615	23	1,638	1,638	1,638

**Methodology:**

- 1) GHG as CO<sub>2</sub>e (TPY) = (CO<sub>2</sub> emissions) + (CH<sub>4</sub> emissions x 21) + (N<sub>2</sub>O emissions x 310)
- 2) Annual Heat Input (MMBtu/yr) = Heat Input (MMBtu/hr) x Operational Hours (hr/year)
- 3) Gas Usage (MMCF/yr) = Annual Heat Usage (MMBtu/yr) x 1 MMCF/1,020 MMBtu
- 4) PTE (TPY) = Annual Gas Usage (MMCF/yr) x Emission Factor (lb/MMCF) x 1 ton / 2,000 lb
- 5) PTE (TPY) = Annual Gas Usage (MMCF/yr) x Emission Factor (kg/MMCF) x 2.2046 lb/kg x 1 ton / 2,000 lb
- 6) Diesel Usage (kgal/yr) = Usage (gal/yr) x 1 kgal / 1,000 gallon
- 7) Heat Input (MMBtu/yr) = Diesel Usage (kgal/yr) x HHV (MMBtu/kgal)
- 8) PTE (TPY) = Diesel Usage (kgal/yr) x Emission Factor (lb/kgal) x 1 ton / 2,000 lb
- 9) Coolant Particulate Emission Factor (lb/kgal) = 0.6 ton/yr x 2,000 lb/ton x 1 yr / 2.0 kgal
- 10) Coolant Usage (lb/yr) = 4,146 lb/batch x 1 batch/ 10 hr x 20% oil by weight x 0.368% loss x 8,760 hr/yr x Safety Factor (2) x 3 machines = 16,038 lb/yr
- 11) Coolant Usage (gallons/yr) = Coolant Usage (lb/yr) x 8 lb coolant / gallons coolant = 2,004.84 gal/yr
- 12) Particulate Test Result (lb/hr) = 0.023 lb/hr x 8,760 hr/yr x 1 ton / 2,000 lb x Safety Factor (2) x 3 machines = 0.6 TPY

**Technical Support Document - Appendix A**  
**Potential to Emit Calculations**  
**Boiler Unit #1 and #2**

**Company Name:** The Ford Meter Box Company, Inc.  
**Address:** 775 Manchester Avenue, Wabash, Indiana 46992-1420  
**Permit Number:** SSM 169-32985-00003 & SPM 169-33227-00003  
**Reviewer:** David Matousek  
**Date:** May 20, 2013

**Design Data - Natural Gas Combustion**

Heat Input Capacity	14.65 MMBtu/hr	(Two boilers at 7.325 MMBtu/hr)		
HHV Natural Gas	1,020 MMBtu/MMCF			
Unlimited Operating Hours	8,760 hr/yr	128,334 MMBtu/yr	125.82 MMCF/yr	
Limited Operating Hours	8,760 hr/yr	128,334 MMBtu/yr	125.82 MMCF/yr	

Pollutant	Emission Factor		PTE (TPY)	Limited PTE (TPY)	Data Source
PM	1.90	lb/MMCF	0.12	0.12	AP-42, Ch 1.4, Table 1.4-2, 7/1998
PM <sub>10</sub> (filterable + condensable)	7.60	lb/MMCF	0.48	0.48	AP-42, Ch 1.4, Table 1.4-2, 7/1998
PM <sub>2.5</sub> (filterable + condensable)	7.60	lb/MMCF	0.48	0.48	AP-42, Ch 1.4, Table 1.4-2, 7/1998
SO <sub>2</sub>	0.60	lb/MMCF	0.04	0.04	AP-42, Ch 1.4, Table 1.4-2, 7/1998
NO <sub>x</sub>	100.00	lb/MMCF	6.29	6.29	AP-42, Ch 1.4, Table 1.4-1, 7/1998
VOC	5.50	lb/MMCF	0.35	0.35	AP-42, Ch 1.4, Table 1.4-2, 7/1998
CO	84.00	lb/MMCF	5.28	5.28	AP-42, Ch 1.4, Table 1.4-1, 7/1998
2-Methylnaphthalene	2.40E-05	lb/MMCF	1.51E-06	1.51E-06	AP-42, Ch 1.4, Table 1.4-3, 7/1998
Benzene	2.10E-03	lb/MMCF	1.32E-04	1.32E-04	AP-42, Ch 1.4, Table 1.4-3, 7/1998
Dichlorobenzene	1.20E-03	lb/MMCF	7.55E-05	7.55E-05	AP-42, Ch 1.4, Table 1.4-3, 7/1998
Fluoranthene	3.00E-06	lb/MMCF	1.89E-07	1.89E-07	AP-42, Ch 1.4, Table 1.4-3, 7/1998
Fluorene	2.80E-06	lb/MMCF	1.76E-07	1.76E-07	AP-42, Ch 1.4, Table 1.4-3, 7/1998
Formaldehyde	7.50E-02	lb/MMCF	4.72E-03	4.72E-03	AP-42, Ch 1.4, Table 1.4-3, 7/1998
Hexane	1.8	lb/MMCF	1.13E-01	1.13E-01	AP-42, Ch 1.4, Table 1.4-3, 7/1998
Naphthalene	6.10E-04	lb/MMCF	3.84E-05	3.84E-05	AP-42, Ch 1.4, Table 1.4-3, 7/1998
Phenanathrene	1.70E-05	lb/MMCF	1.07E-06	1.07E-06	AP-42, Ch 1.4, Table 1.4-3, 7/1998
Pyrene	5.00E-06	lb/MMCF	3.15E-07	3.15E-07	AP-42, Ch 1.4, Table 1.4-3, 7/1998
Toluene	3.40E-03	lb/MMCF	2.14E-04	2.14E-04	AP-42, Ch 1.4, Table 1.4-3, 7/1998
Total HAP			0.12	0.12	Sum of Individual HAPs
CO <sub>2</sub>	53.02	kg/MMBtu	7,500	7,500	40 CFR 98, Subpart C, Table C-1, 12/2010
CH <sub>4</sub>	1.00E-03	kg/MMBtu	1.41E-01	1.41E-01	40 CFR 98, Subpart C, Table C-2, 12/2010
N <sub>2</sub> O	1.00E-04	kg/MMBtu	1.41E-02	1.41E-02	40 CFR 98, Subpart C, Table C-2, 12/2010
GHG as CO <sub>2</sub> e			7,507	7,507	

**Methodology:**

- 1) GHG as CO<sub>2</sub>e (TPY) = (CO<sub>2</sub> emissions) + (CH<sub>4</sub> emissions x 21) + (N<sub>2</sub>O emissions x 310)
- 2) Annual Heat Input (MMBtu/yr) = Heat Input (MMBtu/hr) x Operational Hours (hr/year)
- 3) Gas Usage (MMCF/yr) = Annual Heat Usage (MMBtu/yr) x 1 MMCF/1,020 MMBtu
- 4) PTE (TPY) = Annual Gas Usage (MMCF/yr) x Emission Factor (lb/MMCF) x 1 ton / 2,000 lb
- 5) PTE (TPY) = Annual Gas Usage (MMCF/yr) x Emission Factor (kg/MMBtu) x 2.2046 lb/kg x 1 ton / 2,000 lb

**Technical Support Document - Appendix A**  
**Potential to Emit Calculations**  
**Misc. Natural Gas Combustion Sources**

**Company Name: The Ford Meter Box Company, Inc.**  
**Address: 775 Manchester Avenue, Wabash, Indiana 46992-1420**  
**Permit Number: SSM 169-32985-00003 & SPM 169-33227-00003**  
**Reviewer: David Matousek**  
**Date: May 20, 2013**

**Design Data - Natural Gas Combustion**

Heat Input Capacity	10 MMBtu/hr		
HHV Natural Gas	1,020 MMBtu/MMCF		
Unlimited Operating Hours	8,760 hr/yr	87,600 MMBtu/yr	85.88 MMCF/yr
Limited Operating Hours	8,760 hr/yr	87,600 MMBtu/yr	85.88 MMCF/yr

Pollutant	Emission Factor		PTE (TPY)	Limited PTE (TPY)	Data Source
PM	1.90	lb/MMCF	0.08	0.08	AP-42, Ch 1.4, Table 1.4-2, 7/1998
PM <sub>10</sub> (filterable + condensable)	7.60	lb/MMCF	0.33	0.33	AP-42, Ch 1.4, Table 1.4-2, 7/1998
PM <sub>2.5</sub> (filterable + condensable)	7.60	lb/MMCF	0.33	0.33	AP-42, Ch 1.4, Table 1.4-2, 7/1998
SO <sub>2</sub>	0.60	lb/MMCF	0.03	0.03	AP-42, Ch 1.4, Table 1.4-2, 7/1998
NO <sub>x</sub>	100.00	lb/MMCF	4.29	4.29	AP-42, Ch 1.4, Table 1.4-1, 7/1998
VOC	5.50	lb/MMCF	0.24	0.24	AP-42, Ch 1.4, Table 1.4-2, 7/1998
CO	84.00	lb/MMCF	3.61	3.61	AP-42, Ch 1.4, Table 1.4-1, 7/1998
2-Methylnaphthalene	2.40E-05	lb/MMCF	1.03E-06	1.03E-06	AP-42, Ch 1.4, Table 1.4-3, 7/1998
Benzene	2.10E-03	lb/MMCF	9.02E-05	9.02E-05	AP-42, Ch 1.4, Table 1.4-3, 7/1998
Dichlorobenzene	1.20E-03	lb/MMCF	5.15E-05	5.15E-05	AP-42, Ch 1.4, Table 1.4-3, 7/1998
Fluoranthene	3.00E-06	lb/MMCF	1.29E-07	1.29E-07	AP-42, Ch 1.4, Table 1.4-3, 7/1998
Fluorene	2.80E-06	lb/MMCF	1.20E-07	1.20E-07	AP-42, Ch 1.4, Table 1.4-3, 7/1998
Formaldehyde	7.50E-02	lb/MMCF	3.22E-03	3.22E-03	AP-42, Ch 1.4, Table 1.4-3, 7/1998
Hexane	1.8	lb/MMCF	7.73E-02	7.73E-02	AP-42, Ch 1.4, Table 1.4-3, 7/1998
Naphthalene	6.10E-04	lb/MMCF	2.62E-05	2.62E-05	AP-42, Ch 1.4, Table 1.4-3, 7/1998
Phenanathrene	1.70E-05	lb/MMCF	7.30E-07	7.30E-07	AP-42, Ch 1.4, Table 1.4-3, 7/1998
Pyrene	5.00E-06	lb/MMCF	2.15E-07	2.15E-07	AP-42, Ch 1.4, Table 1.4-3, 7/1998
Toluene	3.40E-03	lb/MMCF	1.46E-04	1.46E-04	AP-42, Ch 1.4, Table 1.4-3, 7/1998
Total HAP			0.08	0.08	Sum of Individual HAPs
CO <sub>2</sub>	53.02	kg/MMBtu	5,120	5,120	40 CFR 98, Subpart C, Table C-1, 12/2010
CH <sub>4</sub>	1.00E-03	kg/MMBtu	9.66E-02	9.66E-02	40 CFR 98, Subpart C, Table C-2, 12/2010
N <sub>2</sub> O	1.00E-04	kg/MMBtu	9.66E-03	9.66E-03	40 CFR 98, Subpart C, Table C-2, 12/2010
GHG as CO <sub>2</sub> e			5,125	5,125	

**Methodology:**

- 1) GHG as CO<sub>2</sub>e (TPY) = (CO<sub>2</sub> emissions) + (CH<sub>4</sub> emissions x 21) + (N<sub>2</sub>O emissions x 310)
- 2) Annual Heat Input (MMBtu/yr) = Heat Input (MMBtu/hr) x Operational Hours (hr/year)
- 3) Gas Usage (MMCF/yr) = Annual Heat Usage (MMBtu/yr) x 1 MMCF/1,020 MMBtu
- 4) PTE (TPY) = Annual Gas Usage (MMCF/yr) x Emission Factor (lb/MMCF) x 1 ton / 2,000 lb
- 5) PTE (TPY) = Annual Gas Usage (MMCF/yr) x Emission Factor (kg/MMBtu) x 2.2046 lb/kg x 1 ton / 2,000 lb

**Technical Support Document - Appendix A  
Potential to Emit Calculations  
Misc. Propane (LPG) and Butane Combustion Sources**

**Company Name: The Ford Meter Box Company, Inc.  
Address: 775 Manchester Avenue, Wabash, Indiana 46992-1420  
Permit Number: SSM 169-32985-00003 & SPM 169-33227-00003  
Reviewer: David Matousek  
Date: May 20, 2013**

**Design Data - Propane Combustion**

Heat Input Capacity	6.0 MMBtu/hr	
Heating Value of Propane	91,500 Btu/gallon	
Unlimited Usage	574.43 kgal/yr	52,560.35 MMBtu/yr
Limited Usage	574.43 kgal/yr	52,560.35 MMBtu/yr
Sulfur Content	5.00 gr/Ft <sup>3</sup>	(www.sbcapcd.org/eng/tech/sulfur01.htm)

Pollutant	Emission Factor		PTE (TPY)	Limited PTE (TPY)	Data Source
PM	0.20	lb/kgal	0.06	0.06	AP-42, Ch 1.5, Table 1.5-1, 7/08
PM <sub>10</sub> (filt.+conden.)	0.70	lb/kgal	0.20	0.20	AP-42, Ch 1.5, Table 1.5-1, 7/08
PM <sub>2.5</sub> (filt.+conden.)	0.70	lb/kgal	0.20	0.20	AP-42, Ch 1.5, Table 1.5-1, 7/08
SO <sub>2</sub>	0.50	lb/kgal	0.14	0.14	AP-42, Ch 1.5, Table 1.5-1, 7/08
NO <sub>x</sub>	13.00	lb/kgal	3.73	3.73	AP-42, Ch 1.5, Table 1.5-1, 7/08
VOC (TOC=VOC)	1.00	lb/kgal	0.29	0.29	AP-42, Ch 1.5, Table 1.5-1, 7/08
CO	7.50	lb/kgal	2.15	2.15	AP-42, Ch 1.5, Table 1.5-1, 7/08
CO <sub>2</sub>	61.46	kg/MMBtu	3,561	3,561	40 CFR 98, Subpart C, Table C-1
CH <sub>4</sub>	1.00E-03	kg/MMBtu	5.79E-02	5.79E-02	40 CFR 98, Subpart C, Table C-2
N <sub>2</sub> O	1.00E-04	kg/MMBtu	5.79E-03	5.79E-03	40 CFR 98, Subpart C, Table C-2
GHG as CO <sub>2</sub> e			3,564	3,564	

**Design Data - Butane Combustion**

Heat Input Capacity	6.0 MMBtu/hr	
Heat Content of Butane	102,000 Btu/gallon	
Unlimited Usage	515.29 kgal/yr	52,559.58 MMBtu/yr
Limited Usage	515.29 kgal/yr	52,559.58 MMBtu/yr
Sulfur Content	5.00 gr/Ft <sup>3</sup>	(assumed the same as propane)

Pollutant	Emission Factor		PTE (TPY)	Limited PTE (TPY)	Data Source
PM	0.20	lb/kgallon	0.05	0.05	AP-42, Ch 1.5, Table 1.5-1, 7/08
PM <sub>10</sub> (filt.+conden.)	0.80	lb/kgallon	0.21	0.21	AP-42, Ch 1.5, Table 1.5-1, 7/08
PM <sub>2.5</sub> (filt.+conden.)	0.80	lb/kgallon	0.21	0.21	AP-42, Ch 1.5, Table 1.5-1, 7/08
SO <sub>2</sub>	0.450	lb/kgallon	0.12	0.12	AP-42, Ch 1.5, Table 1.5-1, 7/08
NO <sub>x</sub>	15.00	lb/kgallon	3.86	3.86	AP-42, Ch 1.5, Table 1.5-1, 7/08
VOC (TOC=VOC)	1.10	lb/kgallon	0.28	0.28	AP-42, Ch 1.5, Table 1.5-1, 7/08
CO	8.40	lb/kgallon	2.16	2.16	AP-42, Ch 1.5, Table 1.5-1, 7/08
CO <sub>2</sub>	65.15	kg/MMBtu	3,775	3,775	40 CFR 98, Subpart C, Table C-1
CH <sub>4</sub>	1.00E-03	kg/MMBtu	5.79E-02	5.79E-02	40 CFR 98, Subpart C, Table C-2
N <sub>2</sub> O	1.00E-04	kg/MMBtu	5.79E-03	5.79E-03	40 CFR 98, Subpart C, Table C-2
GHG as CO <sub>2</sub> e			3,778	3,778	

Continued Next Page

**Technical Support Document - Appendix A**  
**Potential to Emit Calculations**  
**Misc. Propane (LPG) and Butane Combustion Sources**  
**(Continued)**

Pollutant	Propane Emissions (TPY)			Butane Emissions (TPY)			Worst Case Emissions (TPY)		
	PTE	Controlled PTE	Limited (PTE)	PTE	Controlled PTE	Limited (PTE)	PTE	Controlled PTE	Limited (PTE)
PM	0.06	0.06	0.06	0.05	0.05	0.05	0.06	0.06	0.06
PM <sub>10</sub> (filt.+conden.)	0.20	0.20	0.20	0.21	0.21	0.21	0.21	0.21	0.21
PM <sub>2.5</sub> (filt.+conden.)	0.20	0.20	0.20	0.21	0.21	0.21	0.21	0.21	0.21
SO <sub>2</sub>	0.144	0.144	1.44E-01	0.116	0.116	1.16E-01	0.14	0.14	0.14
NO <sub>x</sub>	3.73	3.73	3.73	3.86	3.86	3.86	3.86	3.86	3.86
VOC	0.29	0.29	0.29	0.28	0.28	0.28	0.29	0.29	0.29
CO	2.15	2.15	2.15	2.16	2.16	2.16	2.16	2.16	2.16
CO <sub>2</sub>	3,561	3,561	3,561	3,775	3,775	3,775	3,775	3,775	3,775
CH <sub>4</sub>	5.79E-02	5.79E-02	5.79E-02	5.79E-02	5.79E-02	5.79E-02	5.79E-02	5.79E-02	5.79E-02
N <sub>2</sub> O	5.79E-03	5.79E-03	5.79E-03	5.79E-03	5.79E-03	5.79E-03	5.79E-03	5.79E-03	5.79E-03
GHG as CO <sub>2</sub> e	3,564	3,564	3,564	3,778	3,778	3,778	3,778	3,778	3,778

**Methodology:**

- 1) GHG as CO<sub>2</sub>e (TPY) = (CO<sub>2</sub> emissions) + (CH<sub>4</sub> emissions x 21) + (N<sub>2</sub>O emissions x 310)
- 2) Fuel Usage (kgal/yr) = [Heat Input (MMBtu/hr) x 1E06 Btu/MMBtu x 8,760 hr/yr] / [Heat Content (Btu/gallon) x 1,000 gal / kgal]
- 3) Heat Input (MMBtu/yr) = Heat Input Capacity (MMBtu/hr) x 8,760 hr/yr
- 4) PTE (TPY) = Fuel Usage (kgal/yr) x Emission Factor (lb/kgal) x 1 ton / 2,000 lb
- 5) PTE (TPY) = Heat Input (MMBtu/yr) x Emission Factor (kg/MMBtu) x 2.2046 lb/kg x 1 ton / 2,000 lb

**Notes:**

- 1) Limited PTE (TPY) is set by permit limits. If no limit exists, Limited PTE = PTE
- 2) Emission Units are uncontrolled. Controlled PTE = PTE
- 3) PTE for the unit = worst case emission of each fuel.

## Technical Support Document - Appendix A Potential to Emit - Miscellaneous Operations

**Company Name: The Ford Meter Box Company, Inc.**  
**Address: 775 Manchester Avenue, Wabash, Indiana 46992-1420**  
**Permit Number: SSM 169-32985-00003 & SPM 169-33227-00003**  
**Reviewer: David Matousek**  
**Date: May 20, 2013**

### Tool Grinding Operation (Unit #8)

Pollutant	Hours of Operation (hr/yr)	Hourly Emission Rate (lb/hr)	PTE (TPY)	Control Efficiency	Controlled PTE (TPY)	Limited PTE (TPY)
PM	8,760	0.323	1.41	99.00%	0.01	0.01
PM <sub>10</sub> (filt.+conden.)	8,760	0.097	0.42	99.00%	4.20E-03	4.20E-03
PM <sub>2.5</sub> (filt.+conden.)	8,760	0.097	0.42	99.00%	4.20E-03	4.20E-03
Lead	8,760	0.0032	0.01	98.00%	2.00E-04	2.00E-04

**Notes:**

- 1) The source estimated the hourly emission rates from material collected in the baghouse. The source collected 1,308 lb of material in 4,080 hours. 1,308 pounds of material represents 99% of the material generated by the emission unit.
- 2) PM<sub>10</sub> and PM<sub>2.5</sub> make up 30% of all PM.
- 3) The source assumed 1% of PM consists of lead.
- 4) Limited PTE is set by permit condition.

**Methodology:**

- 1) PTE (TPY) = Hours of Operation (hr/yr) x Hourly Emission Rate (lb/hr) x 1 ton / 2,000 lb
- 2) Controlled PTE (TPY) = Uncontrolled PTE (TPY) x (1 - control efficiency)

### Powder Coating Booth

Pollutant	Hours of Operation (hr/yr)	Hourly Emission Rate (lb/hr)	Estimated Pre-Control Emissions (TPY)	Control Efficiency	PTE and Controlled PTE (TPY)	Limited PTE (TPY)
PM	8,760	1.57	6.88	99.50%	0.03	0.03
PM <sub>10</sub> (filt.+conden.)	8,760	1.57	6.88	99.50%	0.03	0.03
PM <sub>2.5</sub> (filt.+conden.)	8,760	1.57	6.88	99.50%	0.03	0.03

**Notes:**

- 1) The source estimated the uncontrolled hourly emission rate by measuring the material collected by the filter over time and the stated control efficiency.
- 2) The cartridge filter has been determined to be integral to the process.
- 3) The powder coating operation can process eighteen four pound units per hour, 72 lb/hr throughput

**Methodology:**

- 1) PTE (TPY) = Hours of Operation (hr/yr) x Hourly Emission Rate (lb/hr) x 1 ton / 2,000 lb
- 2) Controlled PTE (TPY) = Uncontrolled PTE (TPY) x (1 - control efficiency)

## Technical Support Document - Appendix A 326 IAC 6-3-2 Emission Limit Calculations

**Company Name:** The Ford Meter Box Company, Inc.  
**Address:** 775 Manchester Avenue, Wabash, Indiana 46992-1420  
**Permit Number:** SSM 169-32985-00003 & SPM 169-33227-00003  
**Reviewer:** David Matousek  
**Date:** May 20, 2013

Process Description	Process Weight Rate (ton/hr)	Process Weight Rate (lb/hr)	326 IAC 6-3-2 Limit (lb/hr)	Limit Calculation Notes	Uncontrolled PM Emissions (lb/hr)	Controlled PM Emissions (lb/hr)	Capable of Compliance with 326 IAC 6-3-2
Furnace Charging, Melting, and Pouring (Unit #8)	8.195	16,390	16.8	(b)	46.70	0.54	Yes, with control
Unit #6	67.100	134,200	47.4	(c)	239.90	2.40	Yes, with control
Shakeout and Sand Handling- #1, #2, #3 Sintos (Unit #20)	49.100	98,200	44.4	(c)	175.10	1.75	Yes, with control
Sand Treat & Brass Reclaim Ops (Unit #13)	15.000	30,000	25.2	(b)	54.00	0.54	Yes, with control
Didion Rotary Metal Reclaimer	2.000	4,000	6.52	(b)	6.40	0.06	Yes
Core Room Ventilation (Unit #19)	10.263	20,526	19.5	(b)	9.01	9.01	Yes, control not needed
Iron Room (Unit #5)	0.780	1,560	3.47	(b)	4.03	0.04	Yes, with control
Shotblasting (Unit #11)	2.730	5,460	8.04	(b)	46.40	0.46	Yes, with control
Shotblasting (Unit #12)	1.370	2,740	5.06	(b)	23.30	0.23	Yes, with control
Shotblasting (Unit #14)	8.195	16,390	16.8	(b)	139.30	1.39	Yes, with control
Shotblasting (Unit #29)	2.000	4,000	6.52	(b)	34.00	0.34	Yes, with control
Grinding and Cutoff (Unit #15)	8.195	16,390	16.8	(b)	42.30	0.42	Yes, with control
Cut Off Saw (Unit #30)	2.000	4,000	6.52	(b)	34.00	0.34	Yes, with control
Mach., Grind. & Polish (Unit #16)	0.780	1,560	3.47	(b)	13.30	0.13	Yes, with control
Mach., Grind. & Polish (Unit #17)	2.131	4,262	6.81	(b)	36.20	0.36	Yes, with control
Mach., Grind. & Polish (Unit #18)	0.900	1,800	3.82	(b)	15.30	0.15	Yes, with control
Mach., Grind. & Polish (Unit #26)	2.238	4,476	7.03	(b)	38.00	0.38	Yes, with control
Powder Coating Booth	0.037	74	0.551	(a)	1.57	0.01	Yes, with control

**Note:**

(a) Unit #6 - #1 Handline and Harrison Sand Tanks and Shakeout and conveyor operations for #1 Handline, #1 Harrison, #2 Harrison, #4 Sinto Mold Line

**Emission Limit Calculation Notes:**

- (a) When the process weight rate is less than 100 pounds per hour, the allowable rate of emission is 0.551 pound per hour.
- (b) Emission limitations for process weight rates up to sixty thousand pounds per hour shall be calculated with the following equation:
- $$E \text{ (lb/hr)} = 4.10 P^{0.67}; \text{ Where: } E = \text{Rate of emission in pounds per hour}$$
- $$P = \text{Process Weight Rate in tons per hour}$$
- (c) Emission limitations for process weight rates in excess of sixty thousand pounds per hour shall be calculated with the following equation:
- $$E \text{ (lb/hr)} = 55.0 P^{0.11} - 40; \text{ Where: } E = \text{Rate of emission in pounds per hour}$$
- $$P = \text{Process Weight Rate in tons per hour}$$
- (d) When the process weight rate exceeds two hundred tons per hour, the allow emission may exceed that calculated with equation (c) above, provided the concentration of particulate in the discharge gases to the atmosphere is less than one-tenth pound per thousand pounds of gases.

**Technical Support Document - Appendix A  
Potential to Emit Calculations  
Part 70 Determination**

**Company Name: The Ford Meter Box Company, Inc.  
Address: 775 Manchester Avenue, Wabash, Indiana 46992-1420  
Permit Number: SSM 169-32985-00003 & SPM 169-33227-00003  
Reviewer: David Matousek  
Date: May 20, 2013**

Unit #26 // Prior Modification				Throughput 2.131			
Pollutant	Emission Factor (Ton Charged)	PTE (lb/hr)	PTE (TPY)	Control Efficiency	Controlled PTE (lb/hr)	Controlled PTE (TPY)	Limited PTE (TPY)
<b>Dry Processing - Worst Case Emissions</b>							
PM	17.0 lb/ton	36.227	158.67	99.00%	0.362	1.59	10
PM <sub>10</sub>	1.7 lb/ton	3.623	15.87	99.00%	0.036	0.16	10
PM <sub>2.5</sub>	1.7 lb/ton	3.623	15.87	99.00%	0.036	0.16	NA
Lead	0.84 lb/ton	1.790	7.84	98.00%	0.03580	0.15680	1.34

Unit #26 // After Modification				Throughput 2.238			
Pollutant	Emission Factor (Ton Charged)	PTE (lb/hr)	PTE (TPY)	Control Efficiency	Controlled PTE (lb/hr)	Controlled PTE (TPY)	Limited PTE (TPY)
<b>Dry Processing - Worst Case Emissions</b>							
PM	17.0 lb/ton	38.046	166.64	99.00%	0.38	1.67	9.99
PM <sub>10</sub>	1.7 lb/ton	3.805	16.67	99.00%	0.038	0.17	9.99
PM <sub>2.5</sub>	1.7 lb/ton	3.805	16.67	99.00%	0.038	0.17	9.99
Lead	0.84 lb/ton	1.880	8.23	98.00%	0.03760	0.16460	1.34

Didion Rotary Metal Reclaimer // New Construction				Throughput 2.0000			
Pollutant	Emission Factor	PTE (lb/hr)	PTE (TPY)	Control Efficiency	Controlled PTE (lb/hr)	Controlled PTE (TPY)	Limited PTE (TPY)
PM	3.20 lb/ton	6.40	28.03	99.00%	0.064	0.28	4.99
PM <sub>10</sub>	2.24 lb/ton	4.48	19.62	99.00%	0.045	0.20	4.99
PM <sub>2.5</sub>	2.24 lb/ton	4.48	19.62	99.00%	0.045	0.20	4.99
VOC	1.2 lb/ton	2.40	10.51	0.00%	2.4	10.51	10.51
Lead	0.0064 lb/ton	0.013	0.06	98.00%	2.60E-04	0.001	0.06

**Notes:**

- 1) PM<sub>2.5</sub> is assumed to equal PM<sub>10</sub>
- 2) Total emissions from the core making operation include metal handling, sand handling and combustion.

**Methodology:**

- 1) Emissions (lb/hr) = Throughput (ton/hr) x Emission Factor (lb/ton)
- 2) Emissions (TPY) = Emissions (lb/hr) x 8,760 hr/yr x 1 ton / 2,000 lb
- 3) Controlled Emissions (TPY) = Emissions (TPY) x (1 - control efficiency)
- 4) Limited PTE (TPY) is based on permit limit or rule limit.

**Technical Support Document - Appendix A**  
**Potential to Emit Calculations**  
**Part 70 Determination (Continued)**

Source Modification Determination - 326 IAC 2-7-10.5										
	<b>PM (TPY)</b>	<b>PM<sub>10</sub> (TPY)</b>	<b>PM<sub>2.5</sub> (TPY)</b>	<b>SO<sub>2</sub> (TPY)</b>	<b>NO<sub>x</sub> (TPY)</b>	<b>VOC (TPY)</b>	<b>CO (TPY)</b>	<b>GHGs (TPY)</b>	<b>Total HAP (TPY)</b>	<b>Lead (TPY)</b>
Didion Rotary Metal Reclaimer	28.03	19.62	19.62	0.00	0.00	10.51	0.00	0.00	0.06	0.06
Emissions Increase - Unit #26	7.97	0.80	0.80	0.00	0.00	0.00	0.00	0.00	0.39	0.39
Emission Increase Due to Project	<b>36.00</b>	20.42	20.42	0.00	0.00	10.51	0.00	0.00	0.45	0.45

Major Source Determination - 326 IAC 2-2										
	<b>PM (TPY)</b>	<b>PM<sub>10</sub> (TPY)</b>	<b>PM<sub>2.5</sub> (TPY)</b>	<b>SO<sub>2</sub> (TPY)</b>	<b>NO<sub>x</sub> (TPY)</b>	<b>VOC (TPY)</b>	<b>CO (TPY)</b>	<b>GHGs (TPY)</b>	<b>Total HAP (TPY)</b>	<b>Lead (TPY)</b>
Limited PTE Prior Modification <sup>(a)</sup>	176.02	175.94	175.94	2.02	43.67	98.16	230.11	19,614	24.06	8.18
Project Emissions Increase	36.00	20.42	20.42	0.00	0.00	0.00	0.00	0.00	0.45	0.45
Limited PTE After Modification	212.02	196.36	196.36	2.02	43.67	98.16	230.11	19,614	24.51	8.63
<b>PSD Major Source Threshold</b>	<b>250</b>	<b>250</b>	<b>250</b>	<b>250</b>	<b>250</b>	<b>250</b>	<b>250</b>	<b>100,000</b>	<b>NA</b>	<b>NA</b>
(a) Emissions were estimated by IDEM, OAQ from T169-25077-00003, as modified by 169-31626-00003										



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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**Michael R. Pence**  
*Governor*

**Thomas W. Easterly**  
*Commissioner*

TO: North Manchester Public Library

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

Subject: **Important Information for Display Regarding a Final Determination**

**Applicant Name:** Ford Meter Box Company, Inc.  
**Permit Number:** 169-32985-00003

You previously received information to make available to the public during the public comment period of a draft permit. Enclosed is a copy of the final decision and supporting materials for the same project. Please place the enclosed information along with the information you previously received. To ensure that your patrons have ample opportunity to review the enclosed permit, **we ask that you retain this document for at least 60 days.**

The applicant is responsible for placing a copy of the application in your library. If the permit application is not on file, or if you have any questions concerning this public review process, please contact Joanne Smiddie-Brush, OAQ Permits Administration Section at 1-800-451-6027, extension 3-0185.

Enclosures  
Final Library.dot 6/13/2013



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**Michael R. Pence**  
*Governor*

**Thomas W. Easterly**  
*Commissioner*

## SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED

TO: John Flesher  
Ford Meter Box Company, Inc.  
775 Manchester Ave Wabash IN 46992-1420

DATE: July 30, 2013

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

SUBJECT: Final Decision  
Ford Meter Box Co, Inc.  
169-32985-00003

Enclosed is the final decision and supporting materials for the air permit application referenced above. Please note that this packet contains the original, signed, permit documents.

The final decision is being sent to you because our records indicate that you are the contact person for this application. However, if you are not the appropriate person within your company to receive this document, please forward it to the correct person.

A copy of the final decision and supporting materials has also been sent via standard mail to:  
Chris Shanks, Responsible Official  
OAQ Permits Branch Interested Parties List

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178, or toll-free at 1-800-451-6027 (ext. 3-0178), and ask to speak to the permit reviewer who prepared the permit. If you think you have received this document in error, please contact Joanne Smiddie-Brush of my staff at 1-800-451-6027 (ext 3-0185), or via e-mail at [jbrush@idem.IN.gov](mailto:jbrush@idem.IN.gov).

Final Applicant Cover letter.dot 6/13/2013

# Mail Code 61-53

IDEM Staff	DPABST 7/30/2013 Ford Meter Box Company, Inc. 169-32985-00003 (Final)		Type of Mail:  <b>CERTIFICATE OF MAILING ONLY</b>	AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender		Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204		

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2		Chris Shanks Sr VP & GM Ford Meter Box Company, Inc. 775 Manchester Ave Wabash IN 46992-1420 (RO CAATS)										
3		North Manchester Public Library 405 N. Market St North Manchester IN 46962 (Library)										
4		Wabash County Commissioners 1 West Hill Street Wabash IN 46992 (Local Official)										
5		Wabash City Council and Mayors Office 202 South Wabash Street Wabash IN 46992 (Local Official)										
6		Wabash County Health Department 89 W. Hill, Memorial Hall Wabash IN 46992-3184 (Health Department)										
7		Ted Little Wabash County Council 1076 West 900 North North Manchester IN 46962 (Affected Party)										
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