



*Mitchell E. Daniels, Jr.*  
Governor

*Thomas W. Easterly*  
Commissioner

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

TO: Interested Parties / Applicant  
DATE: January 5, 2009  
RE: Chrysler, LLC / 067-25272-00065  
FROM: Matthew Stuckey, Deputy Branch Chief  
Permits Branch  
Office of Air Quality

### **Notice of Decision: Approval – Effective Immediately**

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted, 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 4-21.5-3-7 and IC 13-15-6-1(b) or IC 13-15-6-1(a) 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.

For an **initial Title V Operating Permit**, a petition for administrative review must be submitted to the Office of Environmental Adjudication within **thirty (30)** days from the receipt of this notice provided under IC 13-15-5-3, pursuant to IC 13-15-6-1(b).

For a **Title V Operating Permit renewal**, a petition for administrative review must be submitted to the Office of Environmental Adjudication within **fifteen (15)** days from the receipt of this notice provided under IC 13-15-5-3, pursuant to IC 13-15-6-1(a).

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.

Pursuant to 326 IAC 2-7-18(d), any person may petition the U.S. EPA to object to the issuance of an initial Title V operating permit, permit renewal, or modification within sixty (60) days of the end of the forty-five (45) day EPA review period. Such an objection must be based only on issues that were raised with reasonable specificity during the public comment period, unless the petitioner demonstrates that it was impracticable to raise such issues, or if the grounds for such objection arose after the comment period.

To petition the U.S. EPA to object to the issuance of a Title V operating permit, contact:

U.S. Environmental Protection Agency  
401 M Street  
Washington, D.C. 20406

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.



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We Protect Hoosiers and Our Environment.*

*Mitchell E. Daniels Jr.*  
Governor

*Thomas W. Easterly*  
Commissioner

100 North Senate Avenue  
Indianapolis, Indiana 46204  
(317) 232-8603  
Toll Free (800) 451-6027  
[www.idem.IN.gov](http://www.idem.IN.gov)

## Part 70 Operating Permit Renewal OFFICE OF AIR QUALITY

**Chrysler LLC - Kokomo Casting Plant  
1001 East Boulevard  
Kokomo, Indiana 46904**

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

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

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

Operation Permit No.: T067-25272-00065	
Issued by:  <i>Tripurari P. Sinha</i> Tripurari P. Sinha, Ph. D., Section Chief Permits Branch Office of Air Quality	Issuance Date: January 5, 2009  Expiration Date: January 5, 2014

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## SECTION A SOURCE SUMMARY

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

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

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The Permittee owns and operates a stationary aluminum die cast plant.

Source Address:	1001 East Boulevard, Kokomo, Indiana 46904
Mailing Address:	1001 East Boulevard, Kokomo, IN 46904
General Source Phone Number:	248-512-1104
SIC Code:	3363
County Location:	Howard
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Operating Permit Program Major Source, under PSD Rules Minor Source, Section 112 of the Clean Air Act 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(15)]

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

- (a) one (1) natural gas-fired aluminum stack melting furnace, identified as SM1 with a maximum melt/remelt capacity of four and four tenths (4.4) tons per hour, constructed in 2008, with a maximum heat input capacity of 10.93 million British thermal units per hour, with emissions uncontrolled and exhausting to stack 1SM;
- (b) one (1) natural gas-fired aluminum stack melting furnace, identified as SM2 with a maximum melt/remelt capacity of four and four tenths (4.4) tons per hour, constructed in 2008, with a maximum heat input capacity of 10.93 million British thermal units per hour, with emissions uncontrolled and exhausting to stack 3SM;
- (c) one (1) natural gas-fired aluminum reverberatory furnace, identified as 2RF with a maximum remelt capacity of thirty (30) tons per hour, constructed in 1984, with a maximum heat input capacity of 20 million British thermal units per hour, with emissions uncontrolled and exhausting to stacks 2RF and 2RCW;
- (d) one (1) natural gas-fired aluminum reverberatory furnace, identified as 4RF, constructed in 1998, with a maximum remelt capacity of 6.5 tons of scrap metal per hour and a maximum heat input capacity of 20 million British thermal units per hour, with emissions uncontrolled and exhausting to stacks 4RF and 4RCW;
- (e) one (1) natural gas-fired aluminum reverberatory furnace, identified as 6RF with a maximum remelt capacity of thirty (30) tons per hour, constructed in 1983, with a maximum heat input capacity of 20 million British thermal units per hour, with emissions uncontrolled and exhausting to stacks 6RF and 5RCW;
- (f) one (1) natural gas-fired aluminum reverberatory furnace, identified as 7RF with no remelt capability and a maximum average throughput of ten (10) tons per hour,

- constructed in 1995, with a maximum heat input capacity of 10 million British thermal units per hour, with emissions uncontrolled and exhausting to stack 7RF;
- (g) one (1) natural gas-fired aluminum reverberatory furnace, identified as 8RF with no remelt capability and a maximum average throughput of ten (10) tons per hour, constructed in 1995, with a maximum heat input capacity of 10 million British thermal units per hour, with emissions uncontrolled and exhausting to stack 8RF;
  - (h) one (1) natural gas-fired aluminum reverberatory furnace, identified as 9RF with no remelt capability and a maximum average throughput of ten (10) tons per hour, constructed in 1998, with a maximum heat input capacity of 10 million British thermal units per hour, with emissions uncontrolled and exhausting to stack 9RF;
  - (i) one (1) natural gas-fired aluminum reverberatory furnace, identified as 10RF, with no remelt capability and a maximum average throughput of ten (10) tons per hour, constructed in 1998, with a maximum heat input capacity of 10 million British thermal units per hour, with emissions uncontrolled and exhausting to stack 10RF;
  - (j) one (1) Pangborn shotblast machine, identified as DC1, constructed in 1968, with a maximum shotblast rate of 72 tons per hour, with emissions controlled by a cartridge filter;
  - (k) one (1) Mesh Belt shotblast machine, identified as DC2, constructed in 1997, with a maximum shotblast rate of 168,000 pounds per hour (84 ton per hour), with emissions controlled by a cartridge filter;
  - (l) one (1) Mesh Belt shotblast machine, identified as DC6, constructed in 1997, with a maximum shotblast rate of 168,000 pounds per hour (84 ton per hour), with emissions controlled by a cartridge filter;
  - (m) one (1) Tumbleblast shotblast machine, identified as DC5, constructed in 2000, with a maximum shotblast rate of 40,000 pounds per hour (20 ton per hour), with emissions controlled by cartridge filter;
  - (n) one Wire Mesh machine used for deburring of parts, identified as DC4, constructed in 1999, with a maximum shotblast rate of 174,760 pounds per hour (87.38 ton per hour), with emissions controlled by a cartridge filter;
  - (o) one (1) Wire Mesh machine used for deburring of parts, identified as DC7, constructed in 2005, with a maximum shotblast rate of 174,760 pounds per hour (87.38 ton per hour), with emissions controlled by a cartridge filter;
  - (p) one (1) Wire Mesh machine used for deburring of parts, identified as DC8, constructed in 2005, with a maximum shotblast rate of 174,760 pounds per hour (87.38 ton per hour), with emissions controlled by a cartridge filter; and
  - (q) one (1) natural gas-fired boiler, identified as 1BLR, constructed in 1964, with a maximum heat input capacity of 95 million British thermal units per hour, with emissions uncontrolled and exhausting to stack 1SB;
  - (r) one (1) natural gas-fired boiler, identified as 2BLR, constructed in 1964, with a maximum heat input capacity of 81.26 million British thermal units per hour, with emissions uncontrolled and exhausting to stack 2SB;and

- (s) one (1) natural gas-fired boiler, identified as 3BLR, constructed in 2000, with a maximum heat input capacity of 77.9 million British thermal units per hour, with emissions uncontrolled and exhausting to stack 3SB.

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

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

- (a) die casting machines, identified as DCAST1, with emissions uncontrolled and exhausting internally;
- (b) trim machines, with emissions uncontrolled and exhausting internally;
- (c) Machining where an aqueous cutting coolant continuously floods the machining interface;
- (d) The following equipment related to manufacturing activities not resulting in the emission of HAPs; brazing equipment, cutting torches, soldering equipment, welding equipment;
- (e) Stockpiled soils from soil remediation activities that are covered and waiting transport for disposal;
- (f) 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 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; woodworking operations, tooling operations including dry grinding/sanding/cutting stations wet grinding stations using a maximum of 0.09 gallons of cutting oil per hour, with emissions controlled by a baghouse and exhausting internally; and
- (g) One (1) diesel fired emergency generator with a maximum power output of 2,130 horsepower and maximum operating hours of 500 hrs/yr.

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, T067-25272-00065, 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 or of permits issued pursuant to Title IV of the Clean Air Act and 326 IAC 21 (Acid Deposition Control).
- (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]

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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)]**

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

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

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

Indiana Department of Environmental Management  
Compliance 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 maintain and implement Preventive Maintenance Plans (PMPs) 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.
- (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 Section), or  
Telephone Number: 317-233-0178 (ask for Compliance Section)

Facsimile Number: 317-233-6865

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

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

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

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

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

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

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
  - (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
  - (e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(9) be revised in response to an emergency.
  - (f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
  - (g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
  - (h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

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

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- (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 T067-25272-00065 and issued pursuant to permitting programs approved into the state implementation plan have been either:
- (1) incorporated as originally stated,
  - (2) revised under 326 IAC 2-7-10.5, or
  - (3) deleted under 326 IAC 2-7-10.5.
- (b) Provided that all terms and conditions are accurately reflected in this permit, all previous registrations and permits are superseded by this Part 70 operating permit, except for permits issued pursuant to Title IV of the Clean Air Act and 326 IAC 21 (Acid Deposition Control)

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

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

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

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

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

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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)]

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

Request for renewal shall be submitted to:

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

- (b) A timely renewal application is one that is:
- (1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
  - (2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ any additional information identified as being needed to process the application.

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

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

(b) Pursuant to 326 IAC 2-7-11(b) and 326 IAC 2-7-12(a), administrative Part 70 operating permit amendments and permit modifications for purposes of the acid rain portion of a Part 70 permit shall be governed by regulations promulgated under Title IV of the Clean Air Act. [40 CFR 72]

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

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

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

(d) 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  
Permits Branch, Office of Air Quality  
100 North Senate Avenue

MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

and

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

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

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

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

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

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

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

- (c) Emission Trades [326 IAC 2-7-20(c)]  
The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).
- (d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]  
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.
- (e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.
- (f) This condition does not apply to emission trades of SO<sub>2</sub> or NO<sub>x</sub> under 326 IAC 21 or 326 IAC 10-4.

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

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

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

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

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

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

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

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

B.25 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 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.2 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.3 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.4 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.5 Stack Height [326 IAC 1-7]

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

#### C.6 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

- (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
- (2) If there is a change in the following:
  - (A) Asbestos removal or demolition start date;
  - (B) Removal or demolition contractor; or
  - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

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

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

- (e) **Procedures for Asbestos Emission Control**  
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Demolition and Renovation**  
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) **Indiana 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.7 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 Data Section, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

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

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

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

### C.8 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.9 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. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

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

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

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

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

**C.10 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.11 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.12 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 prepared and submitted written emergency reduction plans (ERPs) consistent with safe operating procedures on.
- (b) Upon direct notification by IDEM, OAQ that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

**C.13 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]**

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

**C.14 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]**

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

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall 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.16 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)] [326 IAC 2-6]**

- (a) Pursuant to 326 IAC 2-6-3(a)(1), the Permittee shall submit by July 1 of each year an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:

- (1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);
- (2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1 (32) ("Regulated pollutant, which is used only for purposes of Section 19 of this rule") from the source, for purpose of fee assessment.

The statement must be submitted to:

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

The emission statement does require 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.17 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-2]

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.
- (c) If there is a reasonable possibility (as defined in 40 CFR 51.165(a)(6)(vi)(A), 40 CFR 51.165(a)(6)(vi)(B), 40 CFR 51.166(r)(6)(vi)(a), and/or 40 CFR 51.166(r)(6)(vi)(b)) that a "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(II)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(rr) and/or 326 IAC 2-3-1(mm)), the Permittee shall comply with following:
  - (1) Before beginning actual construction of the "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(II)) at an existing emissions unit, document and maintain the following records:
    - (A) A description of the project.

- (B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.
- (C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:
  - (i) Baseline actual emissions;
  - (ii) Projected actual emissions;
  - (iii) Amount of emissions excluded under section 326 IAC 2-2-1(rr)(2)(A)(iii) and/or 326 IAC 2-3-1 (mm)(2)(A)(iii); and
  - (iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.
- (d) If there is a reasonable possibility (as defined in 40 CFR 51.165(a)(6)(vi)(A) and/or 40 CFR 51.166(r)(6)(vi)(a)) that a "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(ll)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(rr) and/or 326 IAC 2-3-1(mm)), the Permittee shall comply with following:
  - (1) Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any existing emissions unit identified in (1)(B) above; and
  - (2) Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity of or the potential to emit that regulated NSR pollutant at the emissions unit.

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

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

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or

before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (e) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.
- (f) If the Permittee is required to comply with the recordkeeping provisions of (d) in Section C.17 - General Record Keeping Requirements for any "project" (as defined in 326 IAC 2-2-1 (qq) and/or 326 IAC 2-3-1 (ll)) at an existing emissions unit, and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ:
  - (1) The annual emissions, in tons per year, from the project identified in (c)(1) in Section C.17- General Record Keeping Requirements exceed the baseline actual emissions, as documented and maintained under Section C.17- General Record Keeping Requirements (c)(1)(C)(i), by a significant amount, as defined in 326 IAC 2-2-1 (xx) and/or 326 IAC 2-3-1 (qq), for that regulated NSR pollutant, and
  - (2) The emissions differ from the preconstruction projection as documented and maintained under Section C.17- General Record Keeping Requirements (c)(1)(C)(ii).
- (g) The report for project at an existing emissions unit shall be submitted within sixty (60) days after the end of the year and contain the following:
  - (1) The name, address, and telephone number of the major stationary source.
  - (2) The annual emissions calculated in accordance with (d)(1) and (2) in Section C.17- General Record Keeping Requirements.
  - (3) The emissions calculated under the actual-to-projected actual test stated in 326 IAC 2-2-2(d)(3) and/or 326 IAC 2-3-2(c)(3).
  - (4) Any other information that the Permittee deems fit to include in this report.

Reports required in this part shall be submitted to:

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

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

## **Stratospheric Ozone Protection**

### **C.19 Compliance with 40 CFR 82 and 326 IAC 22-1**

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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:

- (a) one (1) natural gas-fired aluminum stack melting furnace, identified as SM1 with a maximum melt/remelt capacity of four and four tenths (4.4) tons per hour, constructed in 2008, with a maximum heat input capacity of 10.93 million British thermal units per hour, with emissions uncontrolled and exhausting to stack 1SM;
- (b) one (1) natural gas-fired aluminum stack melting furnace, identified as SM2 with a maximum melt/remelt capacity of four and four tenths (4.4) tons per hour, constructed in 2008, with a maximum heat input capacity of 10.93 million British thermal units per hour, with emissions uncontrolled and exhausting to stack 3SM;
- (c) one (1) natural gas-fired aluminum reverberatory furnace, identified as 2RF with a maximum remelt capacity of thirty (30) tons per hour, constructed in 1984, with a maximum heat input capacity of 20 million British thermal units per hour, with emissions uncontrolled and exhausting to stacks 2RF and 2RCW;
- (d) one (1) natural gas-fired aluminum reverberatory furnace, identified as 4RF, constructed in 1998, with a maximum remelt capacity of 6.5 tons of scrap metal per hour and a maximum heat input capacity of 20 million British thermal units per hour, with emissions uncontrolled and exhausting to stacks 4RF and 4RCW;
- (e) one (1) natural gas-fired aluminum reverberatory furnace, identified as 6RF with a maximum remelt capacity of thirty (30) tons per hour, constructed in 1983, with a maximum heat input capacity of 20 million British thermal units per hour, with emissions uncontrolled and exhausting to stacks 6RF and 5RCW;
- (f) one (1) natural gas-fired aluminum reverberatory furnace, identified as 7RF with no remelt capability and a maximum average throughput of ten (10) tons per hour, constructed in 1995, with a maximum heat input capacity of 10 million British thermal units per hour, with emissions uncontrolled and exhausting to stack 7RF;
- (g) one (1) natural gas-fired aluminum reverberatory furnace, identified as 8RF with no remelt capability and a maximum average throughput of ten (10) tons per hour, constructed in 1995, with a maximum heat input capacity of 10 million British thermal units per hour, with emissions uncontrolled and exhausting to stack 8RF;
- (h) one (1) natural gas-fired aluminum reverberatory furnace, identified as 9RF with no remelt capability and a maximum average throughput of ten (10) tons per hour, constructed in 1998, with a maximum heat input capacity of 10 million British thermal units per hour, with emissions uncontrolled and exhausting to stack 9RF;
- (i) one (1) natural gas-fired aluminum reverberatory furnace, identified as 10RF, with no remelt capability and a maximum average throughput of ten (10) tons per hour, constructed in 1998, with a maximum heat input capacity of 10 million British thermal units per hour, with emissions uncontrolled and exhausting to stack 10RF;

(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 PSD Minor Limit [326 IAC 2-2]

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- (a) Pursuant to Significant Permit Modification No. 067-25504-00065, issued on February 25, 2008:
- (1) The total metal melted/remelted to the two (2) stack melting furnaces, identified as SM1 and SM2 shall be less than 65,000 tons per twelve (12) consecutive month period, with compliance determined at the end of the month.
  - (2) The total PM<sub>10</sub> emissions from the two (2) stack melting furnaces, identified as SM1 and SM2 shall be less than 0.4 lb of PM<sub>10</sub>/ton of melting or remelting.
  - (3) The combined annual flux usage to the stack melting furnaces, identified as SM1 and SM2 shall be less than 21,900 pounds per twelve (12) consecutive month period, with compliance determined at the end of the month.
  - (4) During fluxing operations, the total PM<sub>10</sub> emissions from the stack melting furnaces, identified as SM1 and SM2 shall be less than 0.129 lb of PM<sub>10</sub> /lb of flux.

Compliance with these limits will limit the PM<sub>10</sub> emissions from the two (2) stack melting furnaces, identified as SM1 and SM2 to less than 15 tons per year and render the requirements of 326 IAC 2-2 (PSD) not applicable to the 2008 modification .

- (b) Pursuant to the operating permit T067-5246-00065 issued on June 30, 2003 and revised by Operating Permit T067-25272-00065:
- (1) The total annual flux usage to the Reverberatory Furnaces, identified as 9RF and 10RF shall be less than 21,960 pounds per twelve (12) consecutive month period, each, with compliance determined at the end of the month.
  - (2) During fluxing operations the total PM emissions from the Reverberatory Furnaces, identified as 9RF and 10RF shall be less than 0.9 lb of PM /lb of flux, each.
  - (3) During fluxing operations the total PM<sub>10</sub> emissions from the Reverberatory Furnaces, identified as 9RF and 10RF shall be less than 0.45 lb of PM<sub>10</sub> /lb of flux, each.

Compliance with these limits will limit the PM and PM<sub>10</sub> emissions from the Reverberatory furnaces, identified as 9RF and 10RF to less than 25 and 15 tons per year and render the requirements of 326 IAC 2-2 (PSD) not applicable to 1998 modification.

- (c) Pursuant to the operating permit T067-5246-00065 issued on June 30, 2003 and revised by Operating Permit T067-25272-00065:
- (1) The total annual flux usage to the Reverberatory Furnaces, identified as 7RF and 8RF shall be less than 21,960 pounds per twelve (12) consecutive month period, each, with compliance determined at the end of the month.
  - (2) During fluxing operations the total PM emissions from the Reverberatory Furnaces, identified as 7RF and 8RF shall be less than 0.9 lb of PM /lb of flux, each.

- (3) During fluxing operations the total PM<sub>10</sub> emissions due to flux usage from the Reverberatory Furnaces, identified as 7RF and 8RF shall be less than 0.45 lb of PM<sub>10</sub> /lb of flux, each.

Compliance with these limits will limit the PM and PM<sub>10</sub> emissions from the Reverberatory Furnaces, identified as 7RF and 8RF to less than 25 and 15 tons per year and render the requirements of 326 IAC 2-2 (PSD) not applicable to the 1995 modification.

- (d) Pursuant to the operating permit T067-5246-00065 issued on June 30, 2003 and revised by Operating Permit T067-25272-00065:
  - (1) The total metal remelted to the Reverberatory Furnace, identified as 4RF shall be less than 56,940 tons per twelve (12) consecutive month period, with compliance determined at the end of the month.
  - (2) The total PM emissions from the Reverberatory Furnace, identified as 4RF shall be less than 0.875 lb of PM/ton of metal remelted.
  - (3) The total PM<sub>10</sub> emissions from the Reverberatory Furnace, identified as 4RF shall be less than 0.525 lb of PM<sub>10</sub>/ton of metal remelted.

Compliance with this limit, will limit the PM and PM<sub>10</sub> emissions from the Reverberatory Furnace, identified as 4RF to less than 25 and 15 tons per year, respectively and render 326 IAC 2-2 (PSD) not applicable to this emission unit.

#### D.1.2 Nonattainment NSR [326 IAC 2-1.1-5]

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The permittee shall comply with the following:

- (a) The particulate matter (PM) emissions from the furnace, identified as 2RF shall not exceed 0.85 grains per dry standard cubic foot and 92.5 tons per year.
- (b) The particulate matter (PM) emissions from the furnace, identified as 6RF shall not exceed 0.63 grains per dry standard cubic foot and 36.2 tons per year.

Compliance with the above limits will limit the PM emissions from furnaces 2RF and 6RF to less than 100 tons per twelve (12) consecutive month period, each and will render 326 IAC 2-1.1-5 (Nonattainment NSR) not applicable to the 1983 and 1984 modification.

#### D.1.3 Hazardous Air Pollutants (HAPs) Minor Limit [40 CFR 63]

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Pursuant to Significant Permit Modification No. 067-22771-00065, issued on July 11 2006 and revised by Operating Permit T067-25272-00065, in order for the source to be considered an area source as defined by 40 CFR 63.2 (National Emission Standards for Hazardous Air Pollutants, Subpart A - General Provisions), the following conditions shall apply:

- (a) The total metallic HAPs content of the metals introduced into the stack melting/ reverberatory furnaces, identified as SM1, SM2, and 2RF, 4RF, 6RF through 10RF, shall not exceed one percent (1.0%), by weight, with compliance determined at the end of each month.
- (b) The particulate emissions (PM/PM<sub>10</sub>) from the stack melting/ reverberatory furnaces shall not exceed the following:

Emission Units	PM Limit (lb/ton of metal)	PM10 Limit (lb/ton of metal)
SM1 and SM2	0.4	0.4
2RF and 6RF	0.457	-
4RF	0.875	0.525

Emission Units	PM Limit (lb/lb of flux)	PM10 Limit (lb/lb of flux)
7 RF and 8RF	0.9	0.45
9RF and 10RF	0.9	0.45

Compliance with the above limits, when combined with the production limits in Condition D.1.1 and the HAPs emissions from other emission units, will ensure the HAPs emissions from the stack melting/reverberatory furnaces are less than 3.93 tons per twelve (12) consecutive month period.

This limit is structured such that the total source HAPs emissions remain below ten (10) tons for any single HAP and twenty-five (25) tons total HAPs per year, when including HAPs emissions from the following:

- (a) Chrysler LLC-Kokomo Transmission Plant (Part 70 Operating Permit T067-6504-00065), and
- (b) Chrysler LLC-Kokomo Casting Plant (Part 70 Operating Permit T067-5246-00065).

**D.1.4 Particulate Matter Emission Limitations [326 IAC 6.5-5.2]**

Pursuant to 326 IAC 6.5-5-2, (formerly 326 IAC 6-1-15) (County Specific Particulate Matter Limitations: Chrysler-Haynes), the following conditions shall apply:

- (a) The particulate matter (PM) emissions from the furnace, identified as 2RF shall not exceed 0.85 grains per dry standard cubic foot and 92.5 tons per year.
- (b) The particulate matter (PM) emissions from the furnace, identified as 6RF shall not exceed 0.63 grains per dry standard cubic foot and 36.2 tons per year.

**D.1.5 Particulate Matter Emission Limitations [326 IAC 6.5-1-2]**

Pursuant to 326 IAC 6.5-1-2, (formerly 326 IAC 6-1-2), the particulate matter (PM) emissions from each of the furnaces, identified as SM1, SM2, 4RF, 7RF, 8RF, 9RF and 10RF shall not exceed 0.03 grains per dry standard cubic foot.

**D.1.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]**

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

**Compliance Determination Requirements**

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

- (a) In order to determine compliance with Conditions D.1.1(d)(2) and (3) and D.1.5, the Permittee shall perform PM and PM<sub>10</sub> testing by August 2010 on Reverberatory Furnace, identified as 4RF utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.

- (b) In order to determine compliance with Conditions D.1.2 and D.1.3, the Permittee shall perform PM testing by September 2009 on Reverberatory Furnaces, identified as 2RF or 6RF utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.
- (c) Within one hundred and eighty (180) days of startup (as stated in SPM 067-25504-00065, issued on February 25, 2008, in order to determine compliance with Conditions D.1.1(a)(4) and D.1.4, the Permittee shall perform PM<sub>10</sub> testing on Stack melting furnace, identified as SM1 or SM2 (during fluxing operations) utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.
- (d) Within one hundred and eighty (180) days of startup (as stated in SPM 067-25504-00065, issued on February 25, 2008, in order to determine compliance with Conditions D.1.1(a)(2) and D.1.4, the Permittee shall perform PM<sub>10</sub> testing on Stack melting furnace, identified as SM1 or SM2 (when not conducting fluxing operation) utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.
- (e) In order to determine compliance with Conditions D.1.1(b)(2 and 3), D.1.1(c)(2 and 3) and D.1.4, the Permittee shall perform PM and PM<sub>10</sub> testing by November 2010 on one of the Reverberatory Furnaces, identified as 7 RF, 8 RF, 9RF and 10RF (during fluxing operations) utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.
- (f) In order to determine compliance with Condition D.1.3, the Permittee shall test each pot of molten metal introduced into the stack melting/reverberatory furnaces to verify the individual metallic HAPs and the total metallic HAPs content of the molten metal of each pot, utilizing methods as approved by the Commissioner; or,
- (g) Provide vendor analysis of each pot of molten metal delivered that verifies the individual metallic HAPs and the total metallic HAPs content of the molten metal of each pot. The vendor analysis shall be conducted utilizing methods as approved by the Commissioner.

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

#### **D.1.8 Visible Emissions Notations**

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

for that specific process.

- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps 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.

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

### **D.1.9 Record Keeping Requirements**

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- (a) To document compliance with Condition D.1.8 - Visible Emission Notation, the Permittee shall maintain daily records of the visible emission notations of the furnace exhaust stacks. 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, (e.g. the process did not operate that day).
- (b) To document compliance with Conditions D.1.2 the Permittee shall maintain records of metal melted/remelted in each of the furnace.
- (c) To document compliance with Condition D.1.1(a)(1) and (a)(3), the Permittee shall maintain records of metal melted/remelted and the amount of flux usage in each of the furnace, respectively.
- (d) To document compliance with Condition D.1.1(b)(1), the Permittee shall maintain records the amount of flux usage in each of the furnace.
- (e) To document compliance with Condition D.1.1(c)(1), the Permittee shall maintain records the amount of flux usage in each of the furnace.
- (f) To document compliance with Conditions D.1.1(d)(1) the Permittee shall maintain records of metal remelted in the reverberatory furnace, identified as 4RF.
- (g) To document compliance with the Condition D.1.3, the Permittee shall maintain records in accordance with the following:
  - (1) The Permittee shall maintain records of the results of the test analysis performed by the facility or vendor required by D.1.7(f) or (g).
- (h) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

### **D.1.10 Reporting Requirements**

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- (a) A quarterly summary of the information to document compliance with Conditions D.1.1(a)(1), D.1.1(b)(1), D.1.1(c)(1), D.1.1(d)(1) and D.1.2 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting form located at the end of this permit, or its equivalent, within thirty (30) days after the end of the quarter being reported. The reports submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) A summary of the information to document compliance with Condition D.1.3 shall be submitted to the addresses listed in section C - General Reporting Requirements, upon request.

## SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

### Emissions Unit Description:

- (j) one (1) Pangborn shotblast machine, identified as DC1, constructed in 1968, with a maximum shotblast rate of 72 tons per hour, with emissions controlled by a cartridge filter;
- (k) one (1) Mesh Belt shotblast machine, identified as DC2, constructed in 1997, with a maximum shotblast rate of 168,000 pounds per hour (84 ton per hour), with emissions controlled by a cartridge filter;
- (l) one (1) Mesh Belt shotblast machine, identified as DC6, constructed in 1997, with a maximum shotblast rate of 168,000 pounds per hour (84 ton per hour), with emissions controlled by a cartridge filter;
- (m) one (1) Tumbleblast shotblast machine, identified as DC5, constructed in 2000, with a maximum shotblast rate of 40,000 pounds per hour (20 ton per hour), with emissions controlled by cartridge filter;
- (n) one Wire Mesh machine used for deburring of parts, identified as DC4, constructed in 1999, with a maximum shotblast rate of 174,760 pounds per hour (87.38 ton per hour), with emissions controlled by a cartridge filter;
- (o) one (1) Wire Mesh machine used for deburring of parts, identified as DC7, constructed in 2005, with a maximum shotblast rate of 174,760 pounds per hour (87.38 ton per hour), with emissions controlled by a cartridge filter; and
- (p) one (1) Wire Mesh machine used for deburring of parts, identified as DC8, constructed in 2005, with a maximum shotblast rate of 174,760 pounds per hour (87.38 ton per hour), with emissions controlled by a cartridge filter.

(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 PSD Minor Limits [326 IAC 2-2]

Pursuant to Minor Permit Modification No. 067-21862-00065, issued on January 6, 2006, the Permittee shall comply with the following:

- (a) The total PM emissions from the mesh belt shotblasters, identified as DC2 and DC6 shall not exceed 3.9 pounds per hour, combined. Compliance with this limit will limit the PM emissions to less than twenty-five (25) tons of per year and render the requirements of 326 IAC 2-2 (PSD) not applicable to 1997 modification.
- (b) The PM<sub>10</sub> emissions from the mesh belt shotblasters, identified as DC2 and DC6 shall not exceed 1.62 pounds per hour, combined. Compliance with this limit will limit the PM<sub>10</sub> emissions to less than fifteen (15) tons of per year and render the requirements of 326 IAC 2-2 (PSD) not applicable to 1997 modification.

- (c) The total PM emissions from the mesh shotblast, identified as DC4 shall not exceed 5.4 pounds per hour. Compliance with this limit will limit the PM emissions to less than twenty-five (25) tons of per year and render the requirements of 326 IAC 2-2 (PSD) not applicable to 1999 modification.
- (d) The PM<sub>10</sub> emissions from the mesh shotblast, identified as DC4 shall not exceed 3.12 pounds per hour. Compliance with this limit will limit the PM<sub>10</sub> emissions to less than fifteen (15) tons of per year and render the requirements of 326 IAC 2-2 (PSD) not applicable to 1999 modification.
- (e) The total PM emissions from the Tumbleblast shotblast machine, identified as DC5 shall not exceed 4.64 pounds per hour. Compliance with this limit will limit the PM emissions to less than twenty-five (25) tons of per year and render the requirements of 326 IAC 2-2 (PSD) not applicable to 2000 modification.
- (f) The PM<sub>10</sub> emissions from the Tumbleblast shotblast machine, identified as DC5 shall not exceed 2.36 pounds per hour. Compliance with this limit will limit the PM<sub>10</sub> emissions to less than fifteen (15) tons of per year and render the requirements of 326 IAC 2-2 (PSD) not applicable to 2000 modification.
- (g) The total PM emissions from the mesh shotblast machine, identified as DC7 shall not exceed 2.85 pounds per hour. Compliance with this limit will limit the PM emissions to less than twenty-five (25) tons of per year and render the requirements of 326 IAC 2-2 (PSD) not applicable to 2005 modification.
- (h) The PM<sub>10</sub> emissions from the mesh shotblast machine, identified as DC7 shall not exceed 1.71 pounds per hour. Compliance with this limit will limit the PM<sub>10</sub> emissions to less than fifteen (15) tons of per year and render the requirements of 326 IAC 2-2 (PSD) not applicable to 2005 modification.
- (i) The total PM emissions from the mesh shotblast machine, identified as DC8 shall not exceed 2.85 pounds per hour. Compliance with this limit will limit the PM emissions to less than twenty-five (25) tons of per year and render the requirements of 326 IAC 2-2 (PSD) not applicable to 2005 modification.
- (j) The PM<sub>10</sub> emissions from the mesh shotblast machine, identified as DC8 shall not exceed 1.71 pounds per hour. Compliance with this limit will limit the PM<sub>10</sub> emissions to less than fifteen (15) tons of per year and render the requirements of 326 IAC 2-2 (PSD) not applicable to 2005 modification.

#### D.2.2 Hazardous Air Pollutants (HAPs) Minor Limit [40 CFR 63]

Pursuant to Significant Permit Modification No. 067-22771-00065, issued on July 11 2006, and revised by operating permit 067-25272-00065, in order for the source to be considered an area source as defined by 40 CFR 63.2 (National Emission Standards for Hazardous Air Pollutants, Subpart A - General Provisions), the Permittee shall comply to the following:

- (1) The total metallic HAP content of the shot used by the shotblast machines and wire mesh machines, identified as DC1, DC2, DC4, DC5, DC6, DC7 and DC8 shall not exceed 0.0125 pound of total metallic HAPs per pound of shot with compliance determined at the end of each month.
- (2) The particulate emissions (PM/PM10) from the shotblast and wire mesh machines shall not exceed the following:

Emission Units	PM Limit (lb/hr)	PM10 Limit (lb/hr)
DC2 and DC6	3.9 (combined)	1.62 (combined)
DC4	5.40	3.12
DC5	4.64	2.36
DC7 and DC8	2.85 (each)	1.71 (each)

Compliance with the above limit will ensure that the total metallic HAPs emitted as PM/PM10 from the shotblast and wire mesh machine are less than 1.55 ton per twelve (12) consecutive month period.

- (3) This limits will ensure that the single HAP is less than 10 tons per year and total HAPs is less than 25 tons per year, when including HAPs emissions from the following:
  - (A) Chrysler Corporation LLC - Kokomo Transmission plant (Part 70 Operating Permit T067-6504-00065).
  - (B) Chrysler Corporation LLC - Kokomo Casting plant (Part 70 Operating Permit T067-25727-00065).

**D.2.3 Particulate Matter Emission Limitations; Fuel Combustion Steam Generators, Asphalt Concrete Plant, Grain Elevators Foundries, Mineral Agregate Operations; Modification By Commissioner [362 IAC 6.5-1-2]**

Pursuant to 326 IAC 6.5-1-2, (formerly 326 IAC 6-1-2), the particulate matter (PM) emissions from the cartridge filter controlling each of the shotblast machine, identified as DC1 (Pangborn shotblast machine), DC2 (Mesh belt shotblast machine), DC6 (Mesh belt shot machine), DC5 (Tumbleblast), DC4 (Wire mesh shotblast), DC7 (Wire mesh shotblast), DC8 (Wire mesh shotblast machine) shall not exceed 0.03 grains per dry standard cubic foot.

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

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

**Compliance Determination Requirements**

**D.2.5 Particulate Matter (PM)**

- (a) Inorder to comply with Conditions D.2.1 and D.2.3, the cartridge filter for particulate control shall be in operation at all times when DC1 (Pangborn shotblast machine), DC2 (Mesh belt shotblast machine), DC6 (Mesh belt shot machine), DC5 (Tumbleblast), DC4 (Wire mesh shotblast), DC7 (Wire mesh shotblast), DC8 (Wire mesh shotblast machine) are in operation.
- (b) In the event that filtration failure is observed in a multi-compartment unit, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

**D.2.6 Testing Requirements [326 IAC 2-7-6(1)][326 IAC 2-1.1-11]**

- (a) In order to determine compliance with Conditions D.2.1 and D.2.3, the Permittee shall perform PM testing by June 2012 on Pangborn shotblast machine, identified as DC1and the cartridge filter controlling emissions from the Pangborn shotblast machine utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be

conducted in accordance with Section C- Performance Testing.

- (b) In order to determine compliance with Conditions D.2.1 and D.2.3, the Permittee shall perform PM and PM<sub>10</sub> testing by April 2011 on wire mesh shotblast machine, identified as DC4 and the cartridge filter controlling emissions from the wire mesh shotblast machine utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.
- (c) In order to determine compliance with Conditions D.2.1 and D.2.3, the Permittee shall perform PM and PM<sub>10</sub> testing by October 2013 on one wire mesh shotblast machine, identified as DC7 or DC8 and the cartridge filter controlling emissions from the wire mesh shotblast machine utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.
- (d) In order to determine compliance with Conditions D.2.1 and D.2.3, the Permittee shall perform PM and PM<sub>10</sub> testing by June 2012 on mesh shotblast machine, identified as DC2 and DC6 (both shall be tested simultaneously) and the cartridge filter controlling emissions from the mesh shotblast machine utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.

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

##### **D.2.7 Visible Emissions Notations**

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

##### **D.2.8 Parametric Monitoring**

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The Permittee shall record the pressure drop across the cartridge filters used in conjunction with the shotblast machines, at least once per day when the shotblast machines are in operation. When for any one reading, the pressure drop across the cartridges are outside the normal range of 0.5 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions and Exceedances . A pressure reading that is outside the above mentioned range is not a deviation

from this permit. Failure to take response steps in accordance with Section C - Response to Excursions and Exceedances shall be considered deviation from the permit.

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

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

#### **D.2.9 Record Keeping Requirements**

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- (a) To document compliance with the Condition D.2.2, the Permittee shall maintain records in accordance with the following:
  - (1) The Permittee shall maintain records of material safety data sheets (MSDS), or their equivalent, necessary to verify the individual Metallic HAPs and the total Metallic HAPs content of the shot used during the compliance period. Vendor supplied Technical Data Sheets or Chrysler LLC HAZCON sheets, detailing the alloy composition tested value, are an acceptable equivalent.
- (b) To document compliance with Condition D.2.7 - Visible Emission Notations, the Permittee shall maintain daily records of the visible emission notations of the cartridge filter stack exhaust. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of a visible emission notation, (e.g. the process did not operate that day).
- (c) To document compliance with Condition D.2.8 - Parametric Monitoring, the Permittee shall maintain the daily records of the pressure drop across the cartridge filter controlling the four shotblast machines and the three wire mesh machines. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading, (e.g. the process did not operate that day).
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

#### **D.2.10 Reporting Requirements**

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A summary of the information to document compliance with Condition D.2.2 shall be submitted to the addresses listed in section C - General Reporting Requirements, upon request.

## SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

### Emissions Unit Description:

- (r) one (1) natural gas-fired boiler, identified as 1BLR, constructed in 1964, with a maximum heat input capacity of 95 million British thermal units per hour, with emissions uncontrolled and exhausting to stack 1SB;
- (s) one (1) natural gas-fired boiler, identified as 2BLR, constructed in 1964, with a maximum heat input capacity of 81.26 million British thermal units per hour, with emissions uncontrolled and exhausting to stack 2SB;and
- (t) one (1) natural gas-fired boiler, identified as 3BLR, constructed in 2000, with a maximum heat input capacity of 77.9 million British thermal units per hour, with emissions uncontrolled and exhausting to stack 3SB.

(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.3.2 Particulate Matter Emission Limitations; Fuel Combustion Steam Generators, Asphalt Concrete Plant, Grain Elevators Foundries, Mineral Agregate Operations; Modification By Commissioner [362 IAC 6.5-1-2]

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Pursuant to 326 IAC 6.5-1-2(3), (formerly 326 IAC 6-1-2), the particulate matter (PM) emissions from each of the boilers, identified as 1BLR, 2BLR and 3BLR shall not exceed 0.01 grains per dry standard cubic foot.

## SECTION D.4 EMISSIONS UNIT OPERATION CONDITIONS

### Emissions Unit Description: Specifically Regulated Insignificant Activities

- (a) die casting machines, identified as DCAST1, with emissions uncontrolled and exhausting internally;
- (b) trim machines, with emissions uncontrolled and exhausting internally;
- (c) Machining where an aqueous cutting coolant continuously floods the machining interface;
- (d) The following equipment related to manufacturing activities not resulting in the emission of HAPs; brazing equipment, cutting torches, soldering equipment, welding equipment;
- (e) Stockpiled soils from soil remediation activities that are covered and waiting transport for disposal; and
- (f) 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 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; woodworking operations, tooling operations including dry grinding/sanding/cutting stations wet grinding stations using a maximum of 0.09 gallons of cutting oil per hour, with emissions controlled by a baghouse and exhausting internally.
- (g) One (1) diesel fired emergency generator with a maximum power output of 2,130 horsepower and maximum operating hours of 500 hrs/yr.

(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.4.1 Particulate Matter Emission Limitations; Fuel Combustion Steam Generators, Asphalt Concrete Plant, Grain Elevators Foundries, Mineral Agregate Operations; Modification By Commissioner [362 IAC 6.5-1-2]

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Pursuant to 326 IAC 6.5-1-2, (formerly 326 IAC 6-1-2), the particulate matter (PM) emissions from each of the emission units, die casting machines, trim operations, machining, brazing equipment, cutting torches, soldering equipment, welding equipment, stockplid soil, grinding and machining operations shall not exceed 0.03 grains per dry standard cubic foot.

## SECTION E.1 EMISSIONS UNIT OPERATION CONDITIONS

### Emissions Unit Description:

- (r) one (1) natural gas-fired boiler, identified as 1BLR, constructed in 1964, with a maximum heat input capacity of 95 million British thermal units per hour, with emissions uncontrolled and exhausting to stack 1SB;
- (s) one (1) natural gas-fired boiler, identified as 2BLR, constructed in 1964, with a maximum heat input capacity of 81.26 million British thermal units per hour, with emissions uncontrolled and exhausting to stack 2SB;and
- (t) one (1) natural gas-fired boiler, identified as 3BLR, constructed in 2000, with a maximum heat input capacity of 77.9 million British thermal units per hour, with emissions uncontrolled and exhausting to stack 3SB.

(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)]

#### E.1.1 General Provision Relating to New Source Performance Standards [326 IAC 12-1] [40 CFR 60, Subpart A]

- (a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60 Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1 for the Boiler, identified as 3BLR except as otherwise specified in 40 CFR Part 60, Subpart Dc.
- (b) Pursuant to 40 CFR 60.10, the Permittee shall submit all required notifications and reports to:  
Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue,  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

#### E.1.2 Standard of Performance for Small Industrial-Commercial Institutional Steam Generating Units [326 IAC 12-1] [40 CFR 60, Subpart Dc]

Pursuant to 40 CFR 60 Subpart Dc, the Permittee shall comply with the provisions of Standard of Performance for Small Industrial-Commercial Institutional Steam Generating Units for the Boiler, identified as 3BLR as specified as follows:

- (1) 40 CFR 60.40c
- (2) 40 CFR 60.41c
- (3) 40 CFR 60.42c
- (4) 40 CFR 60.43c
- (5) 40 CFR 60.44c
- (6) 40 CFR 60.45c
- (7) 40 CFR 60.46c
- (8) 40 CFR 60.47c and
- (9) 40 CFR 60.48c

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
PART 70 OPERATING PERMIT  
CERTIFICATION**

Source Name: Chrysler LLC - Kokomo Casting Plant  
Source Address: 1001 East Boulevard, Kokomo, Indiana 46904  
Mailing Address: 1001 East Boulevard, Kokomo, IN 46904  
Part 70 Permit No.: T067-25272-00065

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

Please check what document is being certified:

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

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

Signature:

Printed Name:

Title/Position:

Phone:

Date:

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

**PART 70 OPERATING PERMIT  
EMERGENCY OCCURRENCE REPORT**

Source Name: Chrysler LLC - Kokomo Casting Plant  
Source Address: 1001 East Boulevard, Kokomo, Indiana 46904  
Mailing Address: 1001 East Boulevard, Kokomo, IN 46904  
Part 70 Permit No.: T067-25272-00065

**This form consists of 2 pages**

**Page 1 of 2**

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

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

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

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

**Page 2 of 2**

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency?    Y    N
Type of Pollutants Emitted: TSP, PM-10, SO <sub>2</sub> , VOC, NO <sub>x</sub> , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

A certification is not required for this report.

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION Part 70 Quarterly Report

Source Name: Chrysler LLC-Kokomo Casting Plant  
 Source Address: Chrysler Kokomo Casting Plant  
 1001 East Boulevard, Kokomo, Indiana 46904  
 Source Address: Chrysler Kokomo Transmission Plant  
 2401 S. Reed Road, Kokomo, Indiana 46904  
 Mailing Address: 1001 East Boulevard, Kokomo, Indiana 46904  
 Part 70 Permit No.: T067-25272-00065  
 Facilities: Furnaces 2RF and 6RF  
 Parameter: amount of metal melted/remelted  
 Limits: Furnaces 2RF and 6RF are limited to less than 92.5 and 36.2 tons of per 12 consecutive month period, respectively;

QUARTER :

YEAR:

Month	Furnace Identification	Column 2	Column 3	Column 2 + Column 3
		This Month	Previous 11 Months	12 Month Total
Month 1	Furnaces 2RF and 6RF			
Month 2	Furnaces 2RF and 6RF			
Month 3	Furnaces 2RF and 6RF			

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

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

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL  
 MANAGEMENT  
 OFFICE OF AIR QUALITY  
 COMPLIANCE DATA SECTION  
 Part 70 Quarterly Report**

Source Name: Chrysler LLC-Kokomo Casting Plant  
 Source Address: Chrysler Kokomo Casting Plant  
 1001 East Boulevard, Kokomo, Indiana 46904  
 Source Address: Chrysler Kokomo Transmission Plant  
 2401 S. Reed Road, Kokomo, Indiana 46904  
 Mailing Address: 1001 East Boulevard, Kokomo, Indiana 46904  
 Part 70 Permit No.: T067-25272-00065  
 Facilities: Furnaces SM1 and SM2  
 Parameter: amount of metal melted  
 Limits: Furnaces SM1 and SM2 are limited to a combined total of 65,000 tons of metal per 12 consecutive month period;

QUARTER :

YEAR:

Month		Column 2	Column 3	Column 2 + Column 3
	Furnace Identification	This Month	Previous 11 Months	12 Month Total
Month 1	SM1 and SM2			
Month 2	SM1 and SM2			
Month 3	SM1 and SM2			

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

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

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL  
 MANAGEMENT  
 OFFICE OF AIR QUALITY  
 COMPLIANCE DATA SECTION  
 Part 70 Quarterly Report**

Source Name: Chrysler LLC-Kokomo Casting Plant  
 Source Address: Chrysler Kokomo Casting Plant  
 1001 East Boulevard, Kokomo, Indiana 46904  
 Source Address: Chrysler Kokomo Transmission Plant  
 2401 S. Reed Road, Kokomo, Indiana 46904  
 Mailing Address: 1001 East Boulevard, Kokomo, Indiana 46904  
 Part 70 Permit No.: T067-25272-00065  
 Facilities: Furnaces SM1 and SM2  
 Parameter: amount of flux  
 Limits: Furnaces SM1 and SM2 are limited to a combined total of 21,900 lb PM10 of Flux per twelve (12) consecutive month period.

QUARTER :

YEAR:

Month		Column 2	Column 3	Column 2 + Column 3
	Furnace Identification	This Month	Previous 11 Months	12 Month Total
Month 1	SM1 and SM2			
Month 2	SM1 and SM2			
Month 3	SM1 and SM2			

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

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

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF AIR QUALITY  
 COMPLIANCE DATA SECTION  
 Part 70 Quarterly Report**

Source Name: Chrysler LLC-Kokomo Casting Plant  
 Source Address: Chrysler Kokomo Casting Plant  
 1001 East Boulevard, Kokomo, Indiana 46904  
 Source Address: Chrysler Kokomo Transmission Plant  
 2401 S. Reed Road, Kokomo, Indiana 46904  
 Mailing Address: 1001 East Boulevard, Kokomo, Indiana 46904  
 Part 70 Permit No.: T067-25272-00065  
 Facilities: Furnaces 4RF  
 Parameter: amount of metal remelt  
 Limits: Furnaces 4RF is limited to 56,940 tons of metal remelt per 12 consecutive month period;

QUARTER :

YEAR:

Month		Column 2	Column 3	Column 2 + Column 3
	Furnace Identification	This Month	Previous 11 Months	12 Month Total
Month 1	Furnace 4RF			
Month 2	Furnace 4RF			
Month 3	Furnace 4RF			

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

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

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL  
 MANAGEMENT  
 OFFICE OF AIR QUALITY  
 COMPLIANCE DATA SECTION  
 Part 70 Quarterly Report**

Source Name: Chrysler LLC-Kokomo Casting Plant  
 Source Address: Chrysler Kokomo Casting Plant  
 1001 East Boulevard, Kokomo, Indiana 46904  
 Source Address: Chrysler Kokomo Transmission Plant  
 2401 S. Reed Road, Kokomo, Indiana 46904  
 Mailing Address: 1001 East Boulevard, Kokomo, Indiana 46904  
 Part 70 Permit No.: T067-25272-00065  
 Facilities: Furnaces 7RF and 8RF  
 Parameter: amount of flux  
 Limits: Furnaces 7RF and 8RF are each limited to 21,960 lb of Flux per twelve (12) consecutive month period.

QUARTER :

YEAR:

Month		Column 2	Column 3	Column 2 + Column 3
	Furnace Identification	This Month	Previous 11 Months	12 Month Total
Month 1	Furnaces 7RF and 8RF			
Month 2	Furnaces 7RF and 8RF			
Month 3	Furnaces 7RF and 8RF			

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

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

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL  
 MANAGEMENT  
 OFFICE OF AIR QUALITY  
 COMPLIANCE DATA SECTION  
 Part 70 Quarterly Report**

Source Name: Chrysler LLC-Kokomo Casting Plant  
 Source Address: Chrysler Kokomo Casting Plant  
 1001 East Boulevard, Kokomo, Indiana 46904  
 Source Address: Chrysler Kokomo Transmission Plant  
 2401 S. Reed Road, Kokomo, Indiana 46904  
 Mailing Address: 1001 East Boulevard, Kokomo, Indiana 46904  
 Part 70 Permit No.: T067-25272-00065  
 Facilities: Furnaces 9RF and 10RF  
 Parameter: amount of flux  
 Limits: Furnaces 9RF and 10RF are each limited to 21,960 lb of Flux per twelve (12) consecutive month period.

QUARTER :

YEAR:

Month		Column 2	Column 3	Column 2 + Column 3
	Furnace Identification	This Month	Previous 11 Months	12 Month Total
Month 1	Furnaces 9RF and 10RF			
Month 2	Furnaces 9RF and 10RF			
Month 3	Furnaces 9RF and 10RF			

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

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

Attach a signed certification to complete this report.

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

Source Name: Chrysler LLC - Kokomo Casting Plant  
 Source Address: 1001 East Boulevard, Kokomo, Indiana 46904  
 Mailing Address: 1001 East Boulevard, Kokomo, IN 46904  
 Part 70 Permit No.: T067-25272-00065

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

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

Form Completed by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

Attach a signed certification to complete this report.

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

**New Source Performance Standards (NSPS)**

**40 CFR 63, Subpart Dc—Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units**

Source Name:	Chrysler LLC - Kokomo Casting Plant
Source Location:	1001 E. Boulevard, Kokomo, IN 46904
County:	Howard
SIC Code:	3363
Operating Permit No.:	067-25272-00065
Permit Reviewer:	Josiah Balogun

**Subpart Dc—Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units**

**Source:** 72 FR 32759, June 13, 2007, unless otherwise noted.

***§ 60.40c Applicability and delegation of authority.***

(a) Except as provided in paragraph (d) of this section, the affected facility to which this subpart applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/hr)) or less, but greater than or equal to 2.9 MW (10 MMBtu/hr).

(b) In delegating implementation and enforcement authority to a State under section 111(c) of the Clean Air Act, §60.48c(a)(4) shall be retained by the Administrator and not transferred to a State.

(c) Steam generating units that meet the applicability requirements in paragraph (a) of this section are not subject to the sulfur dioxide (SO<sub>2</sub>) or particulate matter (PM) emission limits, performance testing requirements, or monitoring requirements under this subpart (§§60.42c, 60.43c, 60.44c, 60.45c, 60.46c, or 60.47c) during periods of combustion research, as defined in §60.41c.

(d) Any temporary change to an existing steam generating unit for the purpose of conducting combustion research is not considered a modification under §60.14.

(e) Heat recovery steam generators that are associated with combined cycle gas turbines and meet the applicability requirements of subpart GG or KKKK of this part are not subject to this subpart. This subpart will continue to apply to all other heat recovery steam generators that are capable of combusting more than or equal to 2.9 MW (10 MMBtu/hr) heat input of fossil fuel but less than or equal to 29 MW (100 MMBtu/hr) heat input of fossil fuel. If the heat recovery steam generator is subject to this subpart, only emissions resulting from combustion of fuels in the steam generating unit are subject to this subpart. (The gas turbine emissions are subject to subpart GG or KKKK, as applicable, of this part).

(f) Any facility covered by subpart AAAA of this part is not covered by this subpart.

(g) Any facility covered by an EPA approved State or Federal section 111(d)/129 plan implementing subpart BBBB of this part is not covered by this subpart.

### **§ 60.41c Definitions.**

As used in this subpart, all terms not defined herein shall have the meaning given them in the Clean Air Act and in subpart A of this part.

*Annual capacity factor* means the ratio between the actual heat input to a steam generating unit from an individual fuel or combination of fuels during a period of 12 consecutive calendar months and the potential heat input to the steam generating unit from all fuels had the steam generating unit been operated for 8,760 hours during that 12-month period at the maximum design heat input capacity. In the case of steam generating units that are rented or leased, the actual heat input shall be determined based on the combined heat input from all operations of the affected facility during a period of 12 consecutive calendar months.

*Coal* means all solid fuels classified as anthracite, bituminous, subbituminous, or lignite by the American Society of Testing and Materials in ASTM D388 (incorporated by reference, see §60.17), coal refuse, and petroleum coke. Coal-derived synthetic fuels derived from coal for the purposes of creating useful heat, including but not limited to solvent refined coal, gasified coal, coal-oil mixtures, and coal-water mixtures, are also included in this definition for the purposes of this subpart.

*Coal refuse* means any by-product of coal mining or coal cleaning operations with an ash content greater than 50 percent (by weight) and a heating value less than 13,900 kilojoules per kilogram (kJ/kg) (6,000 Btu per pound (Btu/lb) on a dry basis.

*Cogeneration steam generating unit* means a steam generating unit that simultaneously produces both electrical (or mechanical) and thermal energy from the same primary energy source.

*Combined cycle system* means a system in which a separate source (such as a stationary gas turbine, internal combustion engine, or kiln) provides exhaust gas to a steam generating unit.

*Combustion research* means the experimental firing of any fuel or combination of fuels in a steam generating unit for the purpose of conducting research and development of more efficient combustion or more effective prevention or control of air pollutant emissions from combustion, provided that, during these periods of research and development, the heat generated is not used for any purpose other than preheating combustion air for use by that steam generating unit ( *i.e.* , the heat generated is released to the atmosphere without being used for space heating, process heating, driving pumps, preheating combustion air for other units, generating electricity, or any other purpose).

*Conventional technology* means wet flue gas desulfurization technology, dry flue gas desulfurization technology, atmospheric fluidized bed combustion technology, and oil hydrodesulfurization technology.

*Distillate oil* means fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D396 (incorporated by reference, see §60.17).

*Dry flue gas desulfurization technology* means a SO<sub>2</sub> control system that is located between the steam generating unit and the exhaust vent or stack, and that removes sulfur oxides from the combustion gases of the steam generating unit by contacting the combustion gases with an alkaline reagent and water, whether introduced separately or as a premixed slurry or solution and forming a dry powder material. This definition includes devices where the dry powder material is subsequently converted to another form. Alkaline reagents used in dry flue gas desulfurization systems include, but are not limited to, lime and sodium compounds.

*Duct burner* means a device that combusts fuel and that is placed in the exhaust duct from another source (such as a stationary gas turbine, internal combustion engine, kiln, etc.) to allow the firing of additional fuel to heat the exhaust gases before the exhaust gases enter a steam generating unit.

*Emerging technology* means any SO<sub>2</sub> control system that is not defined as a conventional technology under this section, and for which the owner or operator of the affected facility has received approval from the Administrator to operate as an emerging technology under §60.48c(a)(4).

*Federally enforceable* means all limitations and conditions that are enforceable by the Administrator, including the requirements of 40 CFR parts 60 and 61, requirements within any applicable State implementation plan, and any permit requirements established under 40 CFR 52.21 or under 40 CFR 51.18 and 51.24.

*Fluidized bed combustion technology* means a device wherein fuel is distributed onto a bed (or series of beds) of limestone aggregate (or other sorbent materials) for combustion; and these materials are forced upward in the device by the flow of combustion air and the gaseous products of combustion. Fluidized bed combustion technology includes, but is not limited to, bubbling bed units and circulating bed units.

*Fuel pretreatment* means a process that removes a portion of the sulfur in a fuel before combustion of the fuel in a steam generating unit.

*Heat input* means heat derived from combustion of fuel in a steam generating unit and does not include the heat derived from preheated combustion air, recirculated flue gases, or exhaust gases from other sources (such as stationary gas turbines, internal combustion engines, and kilns).

*Heat transfer medium* means any material that is used to transfer heat from one point to another point.

*Maximum design heat input capacity* means the ability of a steam generating unit to combust a stated maximum amount of fuel (or combination of fuels) on a steady state basis as determined by the physical design and characteristics of the steam generating unit.

*Natural gas* means: (1) A naturally occurring mixture of hydrocarbon and nonhydrocarbon gases found in geologic formations beneath the earth's surface, of which the principal constituent is methane; or (2) liquefied petroleum (LP) gas, as defined by the American Society for Testing and Materials in ASTM D1835 (incorporated by reference, see §60.17).

*Noncontinental area* means the State of Hawaii, the Virgin Islands, Guam, American Samoa, the Commonwealth of Puerto Rico, or the Northern Mariana Islands.

*Oil* means crude oil or petroleum, or a liquid fuel derived from crude oil or petroleum, including distillate oil and residual oil.

*Potential sulfur dioxide emission rate* means the theoretical SO<sub>2</sub> emissions (nanograms per joule (ng/J) or lb/MMBtu heat input) that would result from combusting fuel in an uncleaned state and without using emission control systems.

*Process heater* means a device that is primarily used to heat a material to initiate or promote a chemical reaction in which the material participates as a reactant or catalyst.

*Residual oil* means crude oil, fuel oil that does not comply with the specifications under the definition of distillate oil, and all fuel oil numbers 4, 5, and 6, as defined by the American Society for Testing and Materials in ASTM D396 (incorporated by reference, see §60.17).

*Steam generating unit* means a device that combusts any fuel and produces steam or heats water or any other heat transfer medium. This term includes any duct burner that combusts fuel and is part of a combined cycle system. This term does not include process heaters as defined in this subpart.

*Steam generating unit operating day* means a 24-hour period between 12:00 midnight and the following midnight during which any fuel is combusted at any time in the steam generating unit. It is not necessary for fuel to be combusted continuously for the entire 24-hour period.

*Wet flue gas desulfurization technology* means an SO<sub>2</sub> control system that is located between the steam generating unit and the exhaust vent or stack, and that removes sulfur oxides from the combustion gases of the steam generating unit by contacting the combustion gases with an alkaline slurry or solution and forming a liquid material. This definition includes devices where the liquid material is subsequently converted to another form. Alkaline reagents used in wet flue gas desulfurization systems include, but are not limited to, lime, limestone, and sodium compounds.

*Wet scrubber system* means any emission control device that mixes an aqueous stream or slurry with the exhaust gases from a steam generating unit to control emissions of PM or SO<sub>2</sub>.

*Wood* means wood, wood residue, bark, or any derivative fuel or residue thereof, in any form, including but not limited to sawdust, sanderdust, wood chips, scraps, slabs, millings, shavings, and processed pellets made from wood or other forest residues.

### **§ 60.42c Standard for sulfur dioxide (SO<sub>2</sub>).**

(a) Except as provided in paragraphs (b), (c), and (e) of this section, on and after the date on which the performance test is completed or required to be completed under §60.8, whichever date comes first, the owner or operator of an affected facility that combusts only coal shall neither: cause to be discharged into the atmosphere from the affected facility any gases that contain SO<sub>2</sub> in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 10 percent (0.10) of the potential SO<sub>2</sub> emission rate (90 percent reduction), nor cause to be discharged into the atmosphere from the affected facility any gases that contain SO<sub>2</sub> in excess of 520 ng/J (1.2 lb/MMBtu) heat input. If coal is combusted with other fuels, the affected facility shall neither: cause to be discharged into the atmosphere from the affected facility any gases that contain SO<sub>2</sub> in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 10 percent (0.10) of the potential SO<sub>2</sub> emission rate (90 percent reduction), nor cause to be discharged into the atmosphere from the affected facility any gases that contain SO<sub>2</sub> in excess of the emission limit is determined pursuant to paragraph (e)(2) of this section.

(b) Except as provided in paragraphs (c) and (e) of this section, on and after the date on which the performance test is completed or required to be completed under §60.8, whichever date comes first, the owner or operator of an affected facility that:

(1) Combusts only coal refuse alone in a fluidized bed combustion steam generating unit shall neither:

(i) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO<sub>2</sub> in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 20 percent (0.20) of the potential SO<sub>2</sub> emission rate (80 percent reduction); nor

(ii) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO<sub>2</sub> in excess of 520 ng/J (1.2 lb/MMBtu) heat input. If coal is fired with coal refuse, the affected facility subject to paragraph (a) of this section. If oil or any other fuel (except coal) is fired with coal refuse, the affected facility is subject to the 87 ng/J (0.20 lb/MMBtu) heat input SO<sub>2</sub> emissions limit or the 90 percent SO<sub>2</sub> reduction requirement specified in paragraph (a) of this section and the emission limit is determined pursuant to paragraph (e)(2) of this section.

(2) Combusts only coal and that uses an emerging technology for the control of SO<sub>2</sub> emissions shall neither:

(i) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO<sub>2</sub> in excess of 50 percent (0.50) of the potential SO<sub>2</sub> emission rate (50 percent reduction); nor

(ii) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO<sub>2</sub> in excess of 260 ng/J (0.60 lb/MMBtu) heat input. If coal is combusted with other fuels, the affected facility is subject to the 50 percent SO<sub>2</sub> reduction requirement specified in this paragraph and the emission limit determined pursuant to paragraph (e)(2) of this section.

(c) On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that combusts coal, alone or in combination with any other fuel, and is listed in paragraphs (c)(1), (2), (3), or (4) of this section shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO<sub>2</sub> in excess of the emission limit determined

pursuant to paragraph (e)(2) of this section. Percent reduction requirements are not applicable to affected facilities under paragraphs (c)(1), (2), (3), or (4).

- (1) Affected facilities that have a heat input capacity of 22 MW (75 MMBtu/hr) or less.
  - (2) Affected facilities that have an annual capacity for coal of 55 percent (0.55) or less and are subject to a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor for coal of 55 percent (0.55) or less.
  - (3) Affected facilities located in a noncontinental area.
  - (4) Affected facilities that combust coal in a duct burner as part of a combined cycle system where 30 percent (0.30) or less of the heat entering the steam generating unit is from combustion of coal in the duct burner and 70 percent (0.70) or more of the heat entering the steam generating unit is from exhaust gases entering the duct burner.
- (d) On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that combusts oil shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO<sub>2</sub> in excess of 215 ng/J (0.50 lb/MMBtu) heat input; or, as an alternative, no owner or operator of an affected facility that combusts oil shall combust oil in the affected facility that contains greater than 0.5 weight percent sulfur. The percent reduction requirements are not applicable to affected facilities under this paragraph.
- (e) On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that combusts coal, oil, or coal and oil with any other fuel shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO<sub>2</sub> in excess of the following:

(1) The percent of potential SO<sub>2</sub> emission rate or numerical SO<sub>2</sub> emission rate required under paragraph (a) or (b)(2) of this section, as applicable, for any affected facility that

- (i) Combusts coal in combination with any other fuel;
- (ii) Has a heat input capacity greater than 22 MW (75 MMBtu/hr); and
- (iii) Has an annual capacity factor for coal greater than 55 percent (0.55); and

(2) The emission limit determined according to the following formula for any affected facility that combusts coal, oil, or coal and oil with any other fuel:

$$E_s = \frac{(K_a H_a + K_b H_b + K_c H_c)}{(H_a + H_b + H_c)}$$

Where:

E<sub>s</sub> = SO<sub>2</sub> emission limit, expressed in ng/J or lb/MMBtu heat input;

K<sub>a</sub> = 520 ng/J (1.2 lb/MMBtu);

K<sub>b</sub> = 260 ng/J (0.60 lb/MMBtu);

K<sub>c</sub> = 215 ng/J (0.50 lb/MMBtu);

$H_a$  = Heat input from the combustion of coal, except coal combusted in an affected facility subject to paragraph (b)(2) of this section, in Joules (J) [MMBtu];

$H_b$  = Heat input from the combustion of coal in an affected facility subject to paragraph (b)(2) of this section, in J (MMBtu); and

$H_c K_a H_b$  = Heat input from the combustion of oil, in J (MMBtu).

(f) Reduction in the potential SO<sub>2</sub> emission rate through fuel pretreatment is not credited toward the percent reduction requirement under paragraph (b)(2) of this section unless:

(1) Fuel pretreatment results in a 50 percent (0.50) or greater reduction in the potential SO<sub>2</sub> emission rate; and

(2) Emissions from the pretreated fuel (without either combustion or post-combustion SO<sub>2</sub> control) are equal to or less than the emission limits specified under paragraph (b)(2) of this section.

(g) Except as provided in paragraph (h) of this section, compliance with the percent reduction requirements, fuel oil sulfur limits, and emission limits of this section shall be determined on a 30-day rolling average basis.

(h) For affected facilities listed under paragraphs (h)(1), (2), or (3) of this section, compliance with the emission limits or fuel oil sulfur limits under this section may be determined based on a certification from the fuel supplier, as described under §60.48c(f), as applicable.

(1) Distillate oil-fired affected facilities with heat input capacities between 2.9 and 29 MW (10 and 100 MMBtu/hr).

(2) Residual oil-fired affected facilities with heat input capacities between 2.9 and 8.7 MW (10 and 30 MMBtu/hr).

(3) Coal-fired facilities with heat input capacities between 2.9 and 8.7 MW (10 and 30 MMBtu/hr).

(i) The SO<sub>2</sub> emission limits, fuel oil sulfur limits, and percent reduction requirements under this section apply at all times, including periods of startup, shutdown, and malfunction.

(j) Only the heat input supplied to the affected facility from the combustion of coal and oil is counted under this section. No credit is provided for the heat input to the affected facility from wood or other fuels or for heat derived from exhaust gases from other sources, such as stationary gas turbines, internal combustion engines, and kilns.

### **§ 60.43c Standard for particulate matter (PM).**

(a) On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005, that combusts coal or combusts mixtures of coal with other fuels and has a heat input capacity of 8.7 MW (30 MMBtu/hr) or greater, shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of the following emission limits:

(1) 22 ng/J (0.051 lb/MMBtu) heat input if the affected facility combusts only coal, or combusts coal with other fuels and has an annual capacity factor for the other fuels of 10 percent (0.10) or less.

(2) 43 ng/J (0.10 lb/MMBtu) heat input if the affected facility combusts coal with other fuels, has an annual capacity factor for the other fuels greater than 10 percent (0.10), and is subject to a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor greater than 10 percent (0.10) for fuels other than coal.

(b) On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005, that combusts wood or combusts mixtures of wood with other fuels

(except coal) and has a heat input capacity of 8.7 MW (30 MMBtu/hr) or greater, shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of the following emissions limits:

(1) 43 ng/J (0.10 lb/MMBtu) heat input if the affected facility has an annual capacity factor for wood greater than 30 percent (0.30); or

(2) 130 ng/J (0.30 lb/MMBtu) heat input if the affected facility has an annual capacity factor for wood of 30 percent (0.30) or less and is subject to a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor for wood of 30 percent (0.30) or less.

(c) On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that combusts coal, wood, or oil and has a heat input capacity of 8.7 MW (30 MMBtu/hr) or greater shall cause to be discharged into the atmosphere from that affected facility any gases that exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity.

(d) The PM and opacity standards under this section apply at all times, except during periods of startup, shutdown, or malfunction.

(e)(1) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commences construction, reconstruction, or modification after February 28, 2005, and that combusts coal, oil, wood, a mixture of these fuels, or a mixture of these fuels with any other fuels and has a heat input capacity of 8.7 MW (30 MMBtu/hr) or greater shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of 13 ng/J (0.030 lb/MMBtu) heat input, except as provided in paragraphs (e)(2), (e)(3), and (e)(4) of this section.

(2) As an alternative to meeting the requirements of paragraph (e)(1) of this section, the owner or operator of an affected facility for which modification commenced after February 28, 2005, may elect to meet the requirements of this paragraph. On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commences modification after February 28, 2005 shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of both:

(i) 22 ng/J (0.051 lb/MMBtu) heat input derived from the combustion of coal, oil, wood, a mixture of these fuels, or a mixture of these fuels with any other fuels; and

(ii) 0.2 percent of the combustion concentration (99.8 percent reduction) when combusting coal, oil, wood, a mixture of these fuels, or a mixture of these fuels with any other fuels.

(3) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commences modification after February 28, 2005, and that combusts over 30 percent wood (by heat input) on an annual basis and has a heat input capacity of 8.7 MW (30 MMBtu/hr) or greater shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of 43 ng/J (0.10 lb/MMBtu) heat input.

(4) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, an owner or operator of an affected facility that commences construction, reconstruction, or modification after February 28, 2005, and that combusts only oil that contains no more than 0.50 weight percent sulfur or a mixture of 0.50 weight percent sulfur oil with other fuels not subject to a PM standard under §60.43c and not using a post-combustion technology (except a wet scrubber) to reduce PM or SO<sub>2</sub> emissions is not subject to the PM limit in this section.

### **§ 60.44c Compliance and performance test methods and procedures for sulfur dioxide.**

(a) Except as provided in paragraphs (g) and (h) of this section and §60.8(b), performance tests required under §60.8 shall be conducted following the procedures specified in paragraphs (b), (c), (d), (e), and (f) of this section, as applicable. Section 60.8(f) does not apply to this section. The 30-day notice required in §60.8(d) applies only to the initial performance test unless otherwise specified by the Administrator.

(b) The initial performance test required under §60.8 shall be conducted over 30 consecutive operating days of the steam generating unit. Compliance with the percent reduction requirements and SO<sub>2</sub>emission limits under §60.42c shall be determined using a 30-day average. The first operating day included in the initial performance test shall be scheduled within 30 days after achieving the maximum production rate at which the affect facility will be operated, but not later than 180 days after the initial startup of the facility. The steam generating unit load during the 30-day period does not have to be the maximum design heat input capacity, but must be representative of future operating conditions.

(c) After the initial performance test required under paragraph (b) of this section and §60.8, compliance with the percent reduction requirements and SO<sub>2</sub>emission limits under §60.42c is based on the average percent reduction and the average SO<sub>2</sub>emission rates for 30 consecutive steam generating unit operating days. A separate performance test is completed at the end of each steam generating unit operating day, and a new 30-day average percent reduction and SO<sub>2</sub>emission rate are calculated to show compliance with the standard.

(d) If only coal, only oil, or a mixture of coal and oil is combusted in an affected facility, the procedures in Method 19 of appendix A of this part are used to determine the hourly SO<sub>2</sub>emission rate (E<sub>ho</sub>) and the 30-day average SO<sub>2</sub>emission rate (E<sub>ao</sub>). The hourly averages used to compute the 30-day averages are obtained from the CEMS. Method 19 of appendix A of this part shall be used to calculate E<sub>ao</sub>when using daily fuel sampling or Method 6B of appendix A of this part.

(e) If coal, oil, or coal and oil are combusted with other fuels:

(1) An adjusted E<sub>ho</sub>(E<sub>ho0</sub>) is used in Equation 19–19 of Method 19 of appendix A of this part to compute the adjusted E<sub>ao</sub>(E<sub>ao0</sub>). The E<sub>ho0</sub> is computed using the following formula:

$$E_{ho0} = \frac{E_{ho} - E_w(1 - X_k)}{X_k}$$

Where:

E<sub>ho0</sub> = Adjusted E<sub>ho</sub>, ng/J (lb/MMBtu);

E<sub>ho</sub>= Hourly SO<sub>2</sub>emission rate, ng/J (lb/MMBtu);

E<sub>w</sub>= SO<sub>2</sub>concentration in fuels other than coal and oil combusted in the affected facility, as determined by fuel sampling and analysis procedures in Method 9 of appendix A of this part, ng/J (lb/MMBtu). The value E<sub>w</sub>for each fuel lot is used for each hourly average during the time that the lot is being combusted. The owner or operator does not have to measure E<sub>w</sub>if the owner or operator elects to assume E<sub>w</sub>= 0.

X<sub>k</sub>= Fraction of the total heat input from fuel combustion derived from coal and oil, as determined by applicable procedures in Method 19 of appendix A of this part.

(2) The owner or operator of an affected facility that qualifies under the provisions of §60.42c(c) or (d) (where percent reduction is not required) does not have to measure the parameters E<sub>w</sub>or X<sub>k</sub>if the owner or operator of the affected facility elects to measure emission rates of the coal or oil using the fuel sampling and analysis procedures under Method 19 of appendix A of this part.

(f) Affected facilities subject to the percent reduction requirements under §60.42c(a) or (b) shall determine compliance with the SO<sub>2</sub>emission limits under §60.42c pursuant to paragraphs (d) or (e) of this section, and shall determine compliance with the percent reduction requirements using the following procedures:

(1) If only coal is combusted, the percent of potential SO<sub>2</sub>emission rate is computed using the following formula:

$$\%P_s = 100 \left( 1 - \frac{\%R_g}{100} \right) \left( 1 - \frac{\%R_f}{100} \right)$$

Where:

%P<sub>s</sub>= Potential SO<sub>2</sub>emission rate, in percent;

%R<sub>g</sub>= SO<sub>2</sub>removal efficiency of the control device as determined by Method 19 of appendix A of this part, in percent; and

%R<sub>f</sub>= SO<sub>2</sub>removal efficiency of fuel pretreatment as determined by Method 19 of appendix A of this part, in percent.

(2) If coal, oil, or coal and oil are combusted with other fuels, the same procedures required in paragraph (f)(1) of this section are used, except as provided for in the following:

(i) To compute the %P<sub>s</sub>, an adjusted %R<sub>g</sub>(%R<sub>g0</sub>) is computed from E<sub>ao0</sub> from paragraph (e)(1) of this section and an adjusted average SO<sub>2</sub>inlet rate (E<sub>ai0</sub>) using the following formula:

$$\%R_{g0} = 100 \left( 1 - \frac{E_w}{E_{ai}} \right)$$

Where:

%R<sub>g0</sub> = Adjusted %R<sub>g</sub>, in percent;

E<sub>ao0</sub> = Adjusted E<sub>ao</sub>, ng/J (lb/MMBtu); and

E<sub>ai0</sub> = Adjusted average SO<sub>2</sub>inlet rate, ng/J (lb/MMBtu).

(ii) To compute E<sub>ai0</sub>, an adjusted hourly SO<sub>2</sub>inlet rate (E<sub>hi0</sub>) is used. The E<sub>hi0</sub> is computed using the following formula:

$$E_{hi0} = \frac{E_{hi} - E_w(1 - X_1)}{X_1}$$

Where:

E<sub>hi0</sub> = Adjusted E<sub>hi</sub>, ng/J (lb/MMBtu);

E<sub>hi</sub>= Hourly SO<sub>2</sub>inlet rate, ng/J (lb/MMBtu);

E<sub>w</sub>= SO<sub>2</sub>concentration in fuels other than coal and oil combusted in the affected facility, as determined by fuel sampling and analysis procedures in Method 19 of appendix A of this part, ng/J (lb/MMBtu). The value E<sub>w</sub>for each fuel lot is used for each hourly average during the time that the lot is being combusted. The owner or operator does not have to measure E<sub>w</sub>if the owner or operator elects to assume E<sub>w</sub>= 0; and

$X_k$  = Fraction of the total heat input from fuel combustion derived from coal and oil, as determined by applicable procedures in Method 19 of appendix A of this part.

(g) For oil-fired affected facilities where the owner or operator seeks to demonstrate compliance with the fuel oil sulfur limits under §60.42c based on shipment fuel sampling, the initial performance test shall consist of sampling and analyzing the oil in the initial tank of oil to be fired in the steam generating unit to demonstrate that the oil contains 0.5 weight percent sulfur or less. Thereafter, the owner or operator of the affected facility shall sample the oil in the fuel tank after each new shipment of oil is received, as described under §60.46c(d)(2).

(h) For affected facilities subject to §60.42c(h)(1), (2), or (3) where the owner or operator seeks to demonstrate compliance with the SO<sub>2</sub> standards based on fuel supplier certification, the performance test shall consist of the certification, the certification from the fuel supplier, as described under §60.48c(f), as applicable.

(i) The owner or operator of an affected facility seeking to demonstrate compliance with the SO<sub>2</sub> standards under §60.42c(c)(2) shall demonstrate the maximum design heat input capacity of the steam generating unit by operating the steam generating unit at this capacity for 24 hours. This demonstration shall be made during the initial performance test, and a subsequent demonstration may be requested at any other time. If the demonstrated 24-hour average firing rate for the affected facility is less than the maximum design heat input capacity stated by the manufacturer of the affected facility, the demonstrated 24-hour average firing rate shall be used to determine the annual capacity factor for the affected facility; otherwise, the maximum design heat input capacity provided by the manufacturer shall be used.

(j) The owner or operator of an affected facility shall use all valid SO<sub>2</sub> emissions data in calculating %P<sub>s</sub> and E<sub>h0</sub> under paragraphs (d), (e), or (f) of this section, as applicable, whether or not the minimum emissions data requirements under §60.46c(f) are achieved. All valid emissions data, including valid data collected during periods of startup, shutdown, and malfunction, shall be used in calculating %P<sub>s</sub> or E<sub>h0</sub> pursuant to paragraphs (d), (e), or (f) of this section, as applicable.

### **§ 60.45c Compliance and performance test methods and procedures for particulate matter.**

(a) The owner or operator of an affected facility subject to the PM and/or opacity standards under §60.43c shall conduct an initial performance test as required under §60.8, and shall conduct subsequent performance tests as requested by the Administrator, to determine compliance with the standards using the following procedures and reference methods, except as specified in paragraph (c) of this section.

(1) Method 1 of appendix A of this part shall be used to select the sampling site and the number of traverse sampling points.

(2) Method 3 of appendix A of this part shall be used for gas analysis when applying Method 5, 5B, or 17 of appendix A of this part.

(3) Method 5, 5B, or 17 of appendix A of this part shall be used to measure the concentration of PM as follows:

(i) Method 5 of appendix A of this part may be used only at affected facilities without wet scrubber systems.

(ii) Method 17 of appendix A of this part may be used at affected facilities with or without wet scrubber systems provided the stack gas temperature does not exceed a temperature of 160 °C (320 °F). The procedures of Sections 8.1 and 11.1 of Method 5B of appendix A of this part may be used in Method 17 of appendix A of this part only if Method 17 of appendix A of this part is used in conjunction with a wet scrubber system. Method 17 of appendix A of this part shall not be used in conjunction with a wet scrubber system if the effluent is saturated or laden with water droplets.

(iii) Method 5B of appendix A of this part may be used in conjunction with a wet scrubber system.

(4) The sampling time for each run shall be at least 120 minutes and the minimum sampling volume shall be 1.7 dry standard cubic meters (dscm) [60 dry standard cubic feet (dscf)] except that smaller sampling times or volumes may be approved by the Administrator when necessitated by process variables or other factors.

(5) For Method 5 or 5B of appendix A of this part, the temperature of the sample gas in the probe and filter holder shall be monitored and maintained at  $160 \pm 14$  °C ( $320 \pm 25$  °F).

(6) For determination of PM emissions, an oxygen (O<sub>2</sub>) or carbon dioxide (CO<sub>2</sub>) measurement shall be obtained simultaneously with each run of Method 5, 5B, or 17 of appendix A of this part by traversing the duct at the same sampling location.

(7) For each run using Method 5, 5B, or 17 of appendix A of this part, the emission rates expressed in ng/J (lb/MMBtu) heat input shall be determined using:

(i) The O<sub>2</sub> or CO<sub>2</sub> measurements and PM measurements obtained under this section, (ii) The dry basis F factor, and

(iii) The dry basis emission rate calculation procedure contained in Method 19 of appendix A of this part.

(8) Method 9 of appendix A of this part (6-minute average of 24 observations) shall be used for determining the opacity of stack emissions.

(b) The owner or operator of an affected facility seeking to demonstrate compliance with the PM standards under §60.43c(b)(2) shall demonstrate the maximum design heat input capacity of the steam generating unit by operating the steam generating unit at this capacity for 24 hours. This demonstration shall be made during the initial performance test, and a subsequent demonstration may be requested at any other time. If the demonstrated 24-hour average firing rate for the affected facility is less than the maximum design heat input capacity stated by the manufacturer of the affected facility, the demonstrated 24-hour average firing rate shall be used to determine the annual capacity factor for the affected facility; otherwise, the maximum design heat input capacity provided by the manufacturer shall be used.

(c) In place of PM testing with EPA Reference Method 5, 5B, or 17 of appendix A of this part, an owner or operator may elect to install, calibrate, maintain, and operate a CEMS for monitoring PM emissions discharged to the atmosphere and record the output of the system. The owner or operator of an affected facility who elects to continuously monitor PM emissions instead of conducting performance testing using EPA Method 5, 5B, or 17 of appendix A of this part shall install, calibrate, maintain, and operate a CEMS and shall comply with the requirements specified in paragraphs (c)(1) through (c)(13) of this section.

(1) Notify the Administrator 1 month before starting use of the system.

(2) Notify the Administrator 1 month before stopping use of the system.

(3) The monitor shall be installed, evaluated, and operated in accordance with §60.13 of subpart A of this part.

(4) The initial performance evaluation shall be completed no later than 180 days after the date of initial startup of the affected facility, as specified under §60.8 of subpart A of this part or within 180 days of notification to the Administrator of use of CEMS if the owner or operator was previously determining compliance by Method 5, 5B, or 17 of appendix A of this part performance tests, whichever is later.

(5) The owner or operator of an affected facility shall conduct an initial performance test for PM emissions as required under §60.8 of subpart A of this part. Compliance with the PM emission limit shall be determined by using the CEMS specified in paragraph (d) of this section to measure PM and calculating a 24-hour block arithmetic average emission concentration using EPA Reference Method 19 of appendix A of this part, section 4.1.

(6) Compliance with the PM emission limit shall be determined based on the 24-hour daily (block) average of the hourly arithmetic average emission concentrations using CEMS outlet data.

(7) At a minimum, valid CEMS hourly averages shall be obtained as specified in paragraph (d)(7)(i) of this section for 75 percent of the total operating hours per 30-day rolling average.

(i) At least two data points per hour shall be used to calculate each 1-hour arithmetic average.

(ii) [Reserved]

(8) The 1-hour arithmetic averages required under paragraph (d)(7) of this section shall be expressed in ng/J or lb/MMBtu heat input and shall be used to calculate the boiler operating day daily arithmetic average emission concentrations. The 1-hour arithmetic averages shall be calculated using the data points required under §60.13(e)(2) of subpart A of this part.

(9) All valid CEMS data shall be used in calculating average emission concentrations even if the minimum CEMS data requirements of paragraph (d)(7) of this section are not met.

(10) The CEMS shall be operated according to Performance Specification 11 in appendix B of this part.

(11) During the correlation testing runs of the CEMS required by Performance Specification 11 in appendix B of this part, PM and O<sub>2</sub>(or CO<sub>2</sub>) data shall be collected concurrently (or within a 30- to 60-minute period) by both the continuous emission monitors and the test methods specified in paragraph (d)(7)(i) of this section.

(i) For PM, EPA Reference Method 5, 5B, or 17 of appendix A of this part shall be used.

(ii) For O<sub>2</sub>(or CO<sub>2</sub>), EPA reference Method 3, 3A, or 3B of appendix A of this part, as applicable shall be used.

(12) Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with procedure 2 in appendix F of this part. Relative Response Audit's must be performed annually and Response Correlation Audits must be performed every 3 years.

(13) When PM emissions data are not obtained because of CEMS breakdowns, repairs, calibration checks, and zero and span adjustments, emissions data shall be obtained by using other monitoring systems as approved by the Administrator or EPA Reference Method 19 of appendix A of this part to provide, as necessary, valid emissions data for a minimum of 75 percent of total operating hours on a 30-day rolling average.

(d) The owner or operator of an affected facility seeking to demonstrate compliance under §60.43c(e)(4) shall follow the applicable procedures under §60.48c(f). For residual oil-fired affected facilities, fuel supplier certifications are only allowed for facilities with heat input capacities between 2.9 and 8.7 MW (10 to 30 MMBtu/hr).

### **§ 60.46c Emission monitoring for sulfur dioxide.**

(a) Except as provided in paragraphs (d) and (e) of this section, the owner or operator of an affected facility subject to the SO<sub>2</sub>emission limits under §60.42c shall install, calibrate, maintain, and operate a CEMS for measuring SO<sub>2</sub>concentrations and either O<sub>2</sub>or CO<sub>2</sub>concentrations at the outlet of the SO<sub>2</sub>control device (or the outlet of the steam generating unit if no SO<sub>2</sub>control device is used), and shall record the output of the system. The owner or operator of an affected facility subject to the percent reduction requirements under §60.42c shall measure SO<sub>2</sub>concentrations and either O<sub>2</sub>or CO<sub>2</sub>concentrations at both the inlet and outlet of the SO<sub>2</sub>control device.

(b) The 1-hour average SO<sub>2</sub>emission rates measured by a CEMS shall be expressed in ng/J or lb/MMBtu heat input and shall be used to calculate the average emission rates under §60.42c. Each 1-hour average SO<sub>2</sub>emission rate must be based on at least 30 minutes of operation, and shall be calculated using the data points required under §60.13(h)(2). Hourly SO<sub>2</sub>emission rates are not calculated if the affected facility is operated less than 30 minutes in a 1-hour period and are not counted toward determination of a steam generating unit operating day.

(c) The procedures under §60.13 shall be followed for installation, evaluation, and operation of the CEMS.

(1) All CEMS shall be operated in accordance with the applicable procedures under Performance Specifications 1, 2, and 3 of appendix B of this part.

(2) Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with Procedure 1 of appendix F of this part.

(3) For affected facilities subject to the percent reduction requirements under §60.42c, the span value of the SO<sub>2</sub>CEMS at the inlet to the SO<sub>2</sub>control device shall be 125 percent of the maximum estimated hourly potential SO<sub>2</sub>emission rate of the fuel combusted, and the span value of the SO<sub>2</sub>CEMS at the outlet from the SO<sub>2</sub>control device shall be 50 percent of the maximum estimated hourly potential SO<sub>2</sub>emission rate of the fuel combusted.

(4) For affected facilities that are not subject to the percent reduction requirements of §60.42c, the span value of the SO<sub>2</sub>CEMS at the outlet from the SO<sub>2</sub>control device (or outlet of the steam generating unit if no SO<sub>2</sub>control device is used) shall be 125 percent of the maximum estimated hourly potential SO<sub>2</sub>emission rate of the fuel combusted.

(d) As an alternative to operating a CEMS at the inlet to the SO<sub>2</sub>control device (or outlet of the steam generating unit if no SO<sub>2</sub>control device is used) as required under paragraph (a) of this section, an owner or operator may elect to determine the average SO<sub>2</sub>emission rate by sampling the fuel prior to combustion. As an alternative to operating a CEMS at the outlet from the SO<sub>2</sub>control device (or outlet of the steam generating unit if no SO<sub>2</sub>control device is used) as required under paragraph (a) of this section, an owner or operator may elect to determine the average SO<sub>2</sub>emission rate by using Method 6B of appendix A of this part. Fuel sampling shall be conducted pursuant to either paragraph (d)(1) or (d)(2) of this section. Method 6B of appendix A of this part shall be conducted pursuant to paragraph (d)(3) of this section.

(1) For affected facilities combusting coal or oil, coal or oil samples shall be collected daily in an as-fired condition at the inlet to the steam generating unit and analyzed for sulfur content and heat content according to the Method 19 of appendix A of this part. Method 19 of appendix A of this part provides procedures for converting these measurements into the format to be used in calculating the average SO<sub>2</sub>input rate.

(2) As an alternative fuel sampling procedure for affected facilities combusting oil, oil samples may be collected from the fuel tank for each steam generating unit immediately after the fuel tank is filled and before any oil is combusted. The owner or operator of the affected facility shall analyze the oil sample to determine the sulfur content of the oil. If a partially empty fuel tank is refilled, a new sample and analysis of the fuel in the tank would be required upon filling. Results of the fuel analysis taken after each new shipment of oil is received shall be used as the daily value when calculating the 30-day rolling average until the next shipment is received. If the fuel analysis shows that the sulfur content in the fuel tank is greater than 0.5 weight percent sulfur, the owner or operator shall ensure that the sulfur content of subsequent oil shipments is low enough to cause the 30-day rolling average sulfur content to be 0.5 weight percent sulfur or less.

(3) Method 6B of appendix A of this part may be used in lieu of CEMS to measure SO<sub>2</sub>at the inlet or outlet of the SO<sub>2</sub>control system. An initial stratification test is required to verify the adequacy of the Method 6B of appendix A of this part sampling location. The stratification test shall consist of three paired runs of a suitable SO<sub>2</sub>and CO<sub>2</sub>measurement train operated at the candidate location and a second similar train operated according to the procedures in §3.2 and the applicable procedures in section 7 of Performance Specification 2 of appendix B of this part. Method 6B of appendix A of this part, Method 6A of appendix A of this part, or a combination of Methods 6 and 3 of appendix A of this part or Methods 6C and 3A of appendix A of this part are suitable measurement techniques. If Method 6B of appendix A of this part is used for the second train, sampling time and timer operation may be adjusted for the stratification test as long as an adequate sample volume is collected; however, both sampling trains are to be operated similarly. For the location to be adequate for Method 6B of appendix A of this part 24-hour tests, the mean of the absolute difference between the three paired runs must be less than 10 percent (0.10).

(e) The monitoring requirements of paragraphs (a) and (d) of this section shall not apply to affected facilities subject to §60.42c(h) (1), (2), or (3) where the owner or operator of the affected facility seeks to demonstrate compliance with the SO<sub>2</sub>standards based on fuel supplier certification, as described under §60.48c(f), as applicable.

(f) The owner or operator of an affected facility operating a CEMS pursuant to paragraph (a) of this section, or conducting as-fired fuel sampling pursuant to paragraph (d)(1) of this section, shall obtain emission data for at least 75 percent of the operating hours in at least 22 out of 30 successive steam generating unit operating days. If this

minimum data requirement is not met with a single monitoring system, the owner or operator of the affected facility shall supplement the emission data with data collected with other monitoring systems as approved by the Administrator.

### **§ 60.47c Emission monitoring for particulate matter.**

(a) Except as provided in paragraphs (c), (d), (e), and (f) of this section, the owner or operator of an affected facility combusting coal, oil, or wood that is subject to the opacity standards under §60.43c shall install, calibrate, maintain, and operate a COMS for measuring the opacity of the emissions discharged to the atmosphere and record the output of the system.

(b) All COMS for measuring opacity shall be operated in accordance with the applicable procedures under Performance Specification 1 of appendix B of this part. The span value of the opacity COMS shall be between 60 and 80 percent.

(c) Affected facilities that burn only distillate oil that contains no more than 0.5 weight percent sulfur and/or liquid or gaseous fuels with potential sulfur dioxide emission rates of 26 ng/J (0.06 lb/MMBtu) heat input or less and that do not use a post-combustion technology to reduce SO<sub>2</sub> or PM emissions are not required to operate a CEMS for measuring opacity if they follow the applicable procedures under §60.48c(f).

(d) Owners or operators complying with the PM emission limit by using a PM CEMS monitor instead of monitoring opacity must calibrate, maintain, and operate a CEMS, and record the output of the system, for PM emissions discharged to the atmosphere as specified in §60.45c(d). The CEMS specified in paragraph §60.45c(d) shall be operated and data recorded during all periods of operation of the affected facility except for CEMS breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments.

(e) An affected facility that does not use post-combustion technology (except a wet scrubber) for reducing PM, SO<sub>2</sub>, or carbon monoxide (CO) emissions, burns only gaseous fuels or fuel oils that contain less than or equal to 0.5 weight percent sulfur, and is operated such that emissions of CO to the atmosphere from the affected facility are maintained at levels less than or equal to 0.15 lb/MMBtu on a boiler operating day average basis is not required to operate a COMS for measuring opacity. Owners and operators of affected facilities electing to comply with this paragraph must demonstrate compliance according to the procedures specified in paragraphs (e)(1) through (4) of this section.

(1) You must monitor CO emissions using a CEMS according to the procedures specified in paragraphs (e)(1)(i) through (iv) of this section.

(i) The CO CEMS must be installed, certified, maintained, and operated according to the provisions in §60.58b(i)(3) of subpart Eb of this part.

(ii) Each 1-hour CO emissions average is calculated using the data points generated by the CO CEMS expressed in parts per million by volume corrected to 3 percent oxygen (dry basis).

(iii) At a minimum, valid 1-hour CO emissions averages must be obtained for at least 90 percent of the operating hours on a 30-day rolling average basis. At least two data points per hour must be used to calculate each 1-hour average.

(iv) Quarterly accuracy determinations and daily calibration drift tests for the CO CEMS must be performed in accordance with procedure 1 in appendix F of this part.

(2) You must calculate the 1-hour average CO emissions levels for each steam generating unit operating day by multiplying the average hourly CO output concentration measured by the CO CEMS times the corresponding average hourly flue gas flow rate and divided by the corresponding average hourly heat input to the affected source. The 24-hour average CO emission level is determined by calculating the arithmetic average of the hourly CO emission levels computed for each steam generating unit operating day.

(3) You must evaluate the preceding 24-hour average CO emission level each steam generating unit operating day excluding periods of affected source startup, shutdown, or malfunction. If the 24-hour average CO emission level is greater than 0.15 lb/MMBtu, you must initiate investigation of the relevant equipment and control systems within 24 hours of the first discovery of the high emission incident and, take the appropriate corrective action as soon as practicable to adjust control settings or repair equipment to reduce the 24-hour average CO emission level to 0.15 lb/MMBtu or less.

(4) You must record the CO measurements and calculations performed according to paragraph (e) of this section and any corrective actions taken. The record of corrective action taken must include the date and time during which the 24-hour average CO emission level was greater than 0.15 lb/MMBtu, and the date, time, and description of the corrective action.

(f) An affected facility that burns only gaseous fuels or fuel oils that contain less than or equal to 0.5 weight percent sulfur and operates according to a written site-specific monitoring plan approved by the appropriate delegated permitting authority is not required to operate a COMS for measuring opacity. This monitoring plan must include procedures and criteria for establishing and monitoring specific parameters for the affected facility indicative of compliance with the opacity standard.

### **§ 60.48c Reporting and recordkeeping requirements.**

(a) The owner or operator of each affected facility shall submit notification of the date of construction or reconstruction and actual startup, as provided by §60.7 of this part. This notification shall include:

(1) The design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility.

(2) If applicable, a copy of any federally enforceable requirement that limits the annual capacity factor for any fuel or mixture of fuels under §60.42c, or §60.43c.

(3) The annual capacity factor at which the owner or operator anticipates operating the affected facility based on all fuels fired and based on each individual fuel fired.

(4) Notification if an emerging technology will be used for controlling SO<sub>2</sub> emissions. The Administrator will examine the description of the control device and will determine whether the technology qualifies as an emerging technology. In making this determination, the Administrator may require the owner or operator of the affected facility to submit additional information concerning the control device. The affected facility is subject to the provisions of §60.42c(a) or (b)(1), unless and until this determination is made by the Administrator.

(b) The owner or operator of each affected facility subject to the SO<sub>2</sub> emission limits of §60.42c, or the PM or opacity limits of §60.43c, shall submit to the Administrator the performance test data from the initial and any subsequent performance tests and, if applicable, the performance evaluation of the CEMS and/or COMS using the applicable performance specifications in appendix B of this part.

(c) The owner or operator of each coal-fired, oil-fired, or wood-fired affected facility subject to the opacity limits under §60.43c(c) shall submit excess emission reports for any excess emissions from the affected facility that occur during the reporting period.

(d) The owner or operator of each affected facility subject to the SO<sub>2</sub> emission limits, fuel oil sulfur limits, or percent reduction requirements under §60.42c shall submit reports to the Administrator.

(e) The owner or operator of each affected facility subject to the SO<sub>2</sub> emission limits, fuel oil sulfur limits, or percent reduction requirements under §60.42c shall keep records and submit reports as required under paragraph (d) of this section, including the following information, as applicable.

(1) Calendar dates covered in the reporting period.

(2) Each 30-day average SO<sub>2</sub> emission rate (ng/J or lb/MMBtu), or 30-day average sulfur content (weight percent), calculated during the reporting period, ending with the last 30-day period; reasons for any noncompliance with the emission standards; and a description of corrective actions taken.

(3) Each 30-day average percent of potential SO<sub>2</sub> emission rate calculated during the reporting period, ending with the last 30-day period; reasons for any noncompliance with the emission standards; and a description of the corrective actions taken.

(4) Identification of any steam generating unit operating days for which SO<sub>2</sub> or diluent (O<sub>2</sub> or CO<sub>2</sub>) data have not been obtained by an approved method for at least 75 percent of the operating hours; justification for not obtaining sufficient data; and a description of corrective actions taken.

(5) Identification of any times when emissions data have been excluded from the calculation of average emission rates; justification for excluding data; and a description of corrective actions taken if data have been excluded for periods other than those during which coal or oil were not combusted in the steam generating unit.

(6) Identification of the F factor used in calculations, method of determination, and type of fuel combusted.

(7) Identification of whether averages have been obtained based on CEMS rather than manual sampling methods.

(8) If a CEMS is used, identification of any times when the pollutant concentration exceeded the full span of the CEMS.

(9) If a CEMS is used, description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specifications 2 or 3 of appendix B of this part.

(10) If a CEMS is used, results of daily CEMS drift tests and quarterly accuracy assessments as required under appendix F, Procedure 1 of this part.

(11) If fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification as described under paragraph (f)(1), (2), (3), or (4) of this section, as applicable. In addition to records of fuel supplier certifications, the report shall include a certified statement signed by the owner or operator of the affected facility that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period.

(f) Fuel supplier certification shall include the following information:

(1) For distillate oil:

(i) The name of the oil supplier;

(ii) A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in §60.41c; and

(iii) The sulfur content of the oil.

(2) For residual oil:

(i) The name of the oil supplier;

(ii) The location of the oil when the sample was drawn for analysis to determine the sulfur content of the oil, specifically including whether the oil was sampled as delivered to the affected facility, or whether the sample was drawn from oil in storage at the oil supplier's or oil refiner's facility, or other location;

(iii) The sulfur content of the oil from which the shipment came (or of the shipment itself); and

(iv) The method used to determine the sulfur content of the oil.

(3) For coal:

(i) The name of the coal supplier;

(ii) The location of the coal when the sample was collected for analysis to determine the properties of the coal, specifically including whether the coal was sampled as delivered to the affected facility or whether the sample was collected from coal in storage at the mine, at a coal preparation plant, at a coal supplier's facility, or at another location. The certification shall include the name of the coal mine (and coal seam), coal storage facility, or coal preparation plant (where the sample was collected);

(iii) The results of the analysis of the coal from which the shipment came (or of the shipment itself) including the sulfur content, moisture content, ash content, and heat content; and

(iv) The methods used to determine the properties of the coal.

(4) For other fuels:

(i) The name of the supplier of the fuel;

(ii) The potential sulfur emissions rate of the fuel in ng/J heat input; and

(iii) The method used to determine the potential sulfur emissions rate of the fuel.

(g)(1) Except as provided under paragraphs (g)(2) and (g)(3) of this section, the owner or operator of each affected facility shall record and maintain records of the amount of each fuel combusted during each operating day.

(2) As an alternative to meeting the requirements of paragraph (g)(1) of this section, the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in §60.48c(f) to demonstrate compliance with the SO<sub>2</sub> standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month.

(3) As an alternative to meeting the requirements of paragraph (g)(1) of this section, the owner or operator of an affected facility or multiple affected facilities located on a contiguous property unit where the only fuels combusted in any steam generating unit (including steam generating units not subject to this subpart) at that property are natural gas, wood, distillate oil meeting the most current requirements in §60.42C to use fuel certification to demonstrate compliance with the SO<sub>2</sub> standard, and/or fuels, excluding coal and residual oil, not subject to an emissions standard (excluding opacity) may elect to record and maintain records of the total amount of each steam generating unit fuel delivered to that property during each calendar month.

(h) The owner or operator of each affected facility subject to a federally enforceable requirement limiting the annual capacity factor for any fuel or mixture of fuels under §60.42c or §60.43c shall calculate the annual capacity factor individually for each fuel combusted. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of the calendar month.

(i) All records required under this section shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record.

(j) The reporting period for the reports required under this subpart is each six-month period. All reports shall be submitted to the Administrator and shall be postmarked by the 30th day following the end of the reporting period.

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

**Addendum to the Technical Support Document (ATSD) for a Part 70 Operating Permit (TITLE V)**

**Source Background and Description**

<b>Source Name:</b>	Chrysler LLC - Kokomo Casting Plant
<b>Source Location:</b>	1001 East Boulevard, Kokomo, Indiana 46904
<b>County:</b>	Howard
<b>SIC Code:</b>	3363
<b>Permit Renewal No.:</b>	T067-25272-00065
<b>Permit Reviewer:</b>	Josiah Balogun

On November 11, 2008, the Office of Air Quality (OAQ) had a notice published in the Kokomo Tribune, Kokomo, Indiana, stating that Chrysler LLC - Kokomo Casting Plant had applied for a Part 70 Operating Permit (TITLE V) to continue to operate an aluminum die cast facility, including melt furnaces, machinery, cleaning and heat treating equipment to produce transmissions for use in automobiles and light-duty trucks. The notice also stated that OAQ proposed to issue a Title V for this operation and provided information on how the public could review the proposed Title V and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this Title V should be issued as proposed.

On December 12, 2008, Kristin M. Jarret of Chrysler LLC - Kokomo Casting Plant submitted comments on the proposed Title V Operating Permit. The comments are summarized in the subsequent pages, with IDEM's corresponding responses.

No changes have been made to the TSD because the OAQ prefers that the Technical Support Document reflects the permit that was on public notice. Changes that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result, ensuring that these types of concerns are documented and part of the record regarding this permit decision.

The summary of the comments and IDEM, OAQ responses, including changes to the permit (language deleted is shown in ~~strikeout~~ and language added is shown in **bold**) are as follows:

Comment 1: Furnaces 2RF and 6RF were constructed in 1984 and 1983, respectively, prior to the implementation of the PM10 regulations. Therefore, there are no PM10 limitations that are applicable to furnaces 2RF and 6RF and the listed PM10 emission limitation should be removed from the draft permit.

**Section D.1 – Emission Unit Operation Conditions - Aluminum Furnaces**

**Condition D.1.3 – Hazardous Air Pollutants (HAPs) Minor Limit [40 CFR 63]**

D.1.3(b) The particulate emissions (PM/PM10) from the stack melting/reverberatory furnaces shall not exceed the following:

<b>Emission Units</b>	<b>PM Limit (lb/ton of metal)</b>	<b>PM10 Limit (lb/ton of metal)</b>
SM1 and SM2	0.4	0.4
2RF and 6RF	0.457	<del>0.457</del> none
4RF	0.875	0.525

Response 1: IDEM agrees with Chrysler, Condition D.1.3 has been corrected as stated above in the permit.

Comment 2: This condition requires a Preventative Maintenance Plan for the furnaces and their control devices, however, there are no control devices utilized for control of particulate emissions from the furnaces and therefore, Condition D.1.6 should be removed.

**Condition D.1.6 – Preventive Maintenance Plan [326 IAC 2-7-5(13)]**

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

Response 2: No, in case a mechanical fault, maintenance or operational condition may increase the Potential to Emit (PTE) of the source, therefore this condition shall be retained in the permit.

Comment 3: This change is requested as Condition D.1.5 references furnace 4RF as well as others, while D.1.4 only references furnaces 2RF and 6RF.

**Condition D.1.7 – Testing Requirements [326 IAC 2-7-6(1)][326 IAC 2-1.1-11]**

D.1.7(a) In order to determine compliance with Conditions D.1.1(d)(2) and (3) and ~~D.1.4~~ D.1.5, the Permittee shall perform PM and PM10 testing by August 2010 on Reverberatory Furnace, identified as 4RF . . .

Response 3: Condition D.1.7 ( now Condition D.1.6) - Testing Requirement has been revised accordingly.

Comment 4: Furnaces 7RF, 8RF, 9RF and 10RF are existing furnaces, which have been in operation for numerous years and therefore could not perform testing at this point within one hundred and eighty (180) days of startup. Chrysler has proposed a definitive testing deadline of November 2010 to allow adequate time to prepare for testing and for coordination with other required testing at the facility.

**Condition D.1.7 – Testing Requirements [326 IAC 2-7-6(1)][326 IAC 2-1.1-11]**

D.1.7 (e) ~~Within one hundred and eighty (180) days of startup, in~~ In order to determine compliance with Conditions D.1.1(b)(2 and 3), D.1.1(c)(2 and 3) and D.1.4, the Permittee shall perform PM and PM10 testing by November 2010 on one of the Reverberatory Furnaces, identified as 7 RF, 8 RF, 9RF and 10RF (during fluxing operations) . . .

Response 4: Condition D.1.7 ( now Condition D.1.6) - Testing Requirement has been revised accordingly.

Comments 5: Comment:  
Condition (b)(3) references an emission rate per pound of flux utilized. Condition (a)(3) references a flux usage limitation. Chrysler believes that the appropriate condition to reference is (a)(3).

**Condition D.1.9 – Record Keeping Requirements**

D.1.9 (c) To document compliance with Condition D.1.1(a)(1) and ~~(b)(3)~~ (a)(3), the Permittee shall maintain records of metal melted/remelted and the amount of flux usage in each of the furnace, respectively.

Response 5: Condition D.1.9 (c) ( now Condition D.1.8 (c)) has been revised accordingly.

Comments 6: The conditions referenced above were incorporated into the underlying construction permits to limit emission increases to levels below the appropriate PSD significance thresholds. Chrysler is requesting the language change to clarify that PSD did not apply to the various modifications.

### **Section D.2 – Shot Blast Operations**

#### **Condition D.2.1 – PSD Minor Limits [326 IAC 2-2]**

D.2.1 (b), (d), (f), (h) and (j) [Condition (b) is provided as an example]

The PM10 emissions from the mesh belt shotblasters, identified as DC2 and DC6 shall not exceed 1.62 pounds per hour, combined. Compliance with this limit will limit the PM10 emissions to less than fifteen (15) tons of per year and render the requirements of 326 IAC 2-2 (PSD) are not applicable to the 1997 modification.

Response 6: The typos in Condition D.2.1 have been corrected in the permit.

Comments 7: Comment:

The referenced November 2008 testing deadline predates the publication of the draft Part 70 Permit and will also predate the effective of the Part 70 Permit when it is issued. Chrysler performed testing related to DC7 and DC8 in October 2008. In accordance with the Title V policy to perform required testing a least once every five years, the testing deadline should be changed to October 2013 which is five years from the most recent test.

#### **D.2.6 – Testing Requirements [326 IAC 2-7-6(1)][326 IAC 2-1.1-11]**

D.2.6 (c) In order to determine compliance with Conditions D.2.1 and D.2.3, the Permittee shall perform PM and PM10 testing by ~~November 2008~~ October 2013 on one wire mesh shotblast machine, identified as DC7 or DC8 and the cartridge filter controlling emissions from the wire mesh shotblast machine utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.

Response 7: Condition D.2.6(c) has been revised accordingly.

Comments 8: Comment:

The first sentence of Condition D.2.9 (a)(1) had a “period” inserted after the word period to make it grammatically correct.

#### **D.2.9 – Record Keeping Requirements**

D.2.9 (a) To document compliance with the Condition D.2.2, the Permittee shall maintain records in accordance with the following:

- (1) The Permittee shall maintain records of material safety data sheets (MSDS), or their equivalent, necessary to verify the individual Metallic HAPs and the total Metallic HAPs content of the shot used during the compliance period. Vendor supplied Technical Data Sheets or Chrysler LLC HAZCON sheets, detailing the alloy composition tested value, are an acceptable equivalent.

Response 8: The typo in Condition D.2.9 (a) has been corrected in the permit.

Comments 9: Chrysler requests that Attachment A be removed from the draft permit. While it may be considered convenient to have an applicable standard attached to a permit, Chrysler is concerned that this may pose several practical difficulties for facilities and create an unnecessary burden.

1) If one or more, large standards apply to a facility the permit will become a very large document physically.

2) Attachment A is not referenced by any of the conditions in the permit. Therefore, it is unclear if the attached standard(s) must be followed if said standard is updated by USEPA.

3) If a standard is changed, IDEM might require the source to expend the effort to amend the permit to include the updated standard in the attachments to the permit.

4) Does the attached standard need to be addressed for every regulatory citation it contains in the annual compliance determination? This would create a substantial quantity of additional documentation as many standards contain multiple provisions that only apply to small subsets of sources. For example, NSPS Subpart Dc contains numerous provisions for coal and oil fuels that do not apply to the natural fired boiler, 3BLR.

#### **Attachment A – New Source Performance Standards**

The New Source Performance Standard (NSPS) 40 CFR 63, Subpart Dc for Small Industrial-Commercial-Institutional Steam Generating Units is included in its entirety in Attachment A.

Response 9: If the Federal Standard in Attachment A referenced in Section E of the permit is amended, the Permittee shall comply with the amended Federal Standard and the Permittee shall apply to IDEM to administratively amend the permit.

Comments 10: **Technical Support Document and Appendix A Calculations:** The potential particulate emission rates for the aluminum furnaces and shot blast operations are utilizing different emission factors from those previously provided by KCP and subsequently utilized by IDEM in various permitting actions. This results in a significant overestimation of potential emissions. KCP requests that the previous factors be utilized to provide a more accurate assessment of KCP's particulate matter emissions. The general emission factor for the aluminum furnaces is 0.39 pounds PM per pounds of metal re-melted (with only combustion related emissions for the addition of already molten aluminum), and for the shot blast units it is 0.000225 pounds PM/PM10 per pound of shot blasted (prior to removal by any control device).

Response 10: The Potential to Emit (Uncontrolled) and the controlled emissions have been revised based on the emission factors supplied by the source (Chrysler LLC - kokomo Casting Plant). The emission factors have been included in the calculations (Appendix A). This ATSD becomes part of the TSD.

Uncontrolled Potential Emissions								
Emission Unit	Year of Construction	PM (tons/yr)	PM <sub>10</sub> (tons/yr)	SO <sub>2</sub> (tons/yr)	VOC (tons/yr)	CO (tons/yr)	NOx (tons/yr)	HAPs (tons/yr)
Two Stack Melting Furnaces (SM1 and SM2)	2007	15.44	15.94	0.1	0.5	8	9.6	0.18
Reverberatory Fur.2RF	1984	<del>565.42</del> 51.25	<del>342.3</del> 51.25	0.1	27.3	7.4	8.8	0.16
Reverberatory Fur.4RF	1998	24.91	14.98	0.1	6.19	7.4	8.8	0.16
Reverberatory Fur.6RF	1983	<del>565.42</del> 51.25	<del>342.3</del> 51.25	0.1	27.3	7.4	8.8	0.16
Reverberatory Fur.7RF	1995	<del>188.4</del> 17.08	<del>114.2</del> 17.08	0	8.96	3.7	4.4	0.082
Reverberatory Fur.8RF	1995	<del>188.4</del> 17.08	<del>114.2</del> 17.08	0	8.96	3.7	4.4	0.082
Reverberatory Fur.9RF	1990	<del>188.4</del> 17.08	<del>114.2</del> 17.08	0	8.96	3.7	4.4	0.082
Reverberatory Fur.10RF	1990	<del>188.4</del> 17.08	<del>114.2</del> 17.08	0	8.96	3.7	4.4	0.082
Pangborn Shotblast machine DC1	1968	<del>5361.12</del> > 25	<del>536.11</del> > 15	0	0	0	0	8.28
Mesh Belt Shotblast machine DC2	1997	<del>6254.64</del> > 25	<del>625.64</del> > 15	0	0	0	0	9.66
Mesh Belt Shotblast machine DC6	1997	<del>6254.64</del> > 25	<del>625.64</del> > 15	0	0	0	0	9.66
Tumbleblast Shotblast machine DC5	2000	<del>1489.2</del> > 25	<del>148.92</del> > 15	0	0	0	0	2.3
Wire Mesh machine DC4	1999	<del>6506.34</del> > 25	<del>650.63</del> > 15	0	0	0	0	10.05
Wire Mesh machine DC7	2005	<del>6506.34</del> > 25	<del>650.63</del> > 15	0	0	0	0	10.05
Wire Mesh machine DC8	2005	<del>6506.34</del> > 25	<del>650.63</del> > 15	0	0	0	0	10.05
Boiler 1BLR	1964	0.8	3.2	0.2	2.3	35	41.6	0.78
Boiler 2BLR	1964	0.7	2.7	0.21	2	29.9	35.6	0.67
Boiler 3BLR	2000	0.6	2.6	0.2	1.9	28.7	34.1	0.77
Emergency Generator		0.5	0.5	2.8	0.5	3.9	16.9	0
Insignificant Activities		4.51	4.51	0	0	0	0	0
Total Emissions		> 250	> 250	3.81	103.83	142.5	181.8	Single > 10 Total > 250

Controlled Potential Emissions								
Emission Unit	Year of Construction	PM (tons/yr)	PM <sub>10</sub> (tons/yr)	SO <sub>2</sub> (tons/yr)	VOC (tons/yr)	CO (tons/yr)	NOx (tons/yr)	HAPs (tons/yr)
Two Stack Melting Furnaces (SM1 and SM2)	2007	15.44	15.94	0.1	0.5	8	9.6	0.18
Reverberatory Fur.2RF	1984	<del>565.42</del> <b>51.25</b>	<del>342.34</del> <b>51.25</b>	0.1	27.3	7.4	8.8	0.16
Reverberatory Fur.4RF	1998	24.91	14.98	0.1	6.19	7.4	8.8	0.16
Reverberatory Fur.6RF	1983	<del>565.42</del> <b>51.25</b>	<del>342.34</del> <b>51.25</b>	0.1	27.3	7.4	8.8	0.16
Reverberatory Fur.7RF	1995	<del>188.4</del> <b>17.08</b>	<del>114.2</del> <b>17.08</b>	0	8.96	3.7	4.4	0.082
Reverberatory Fur.8RF	1995	<del>188.4</del> <b>17.08</b>	<del>114.2</del> <b>17.08</b>	0	8.96	3.7	4.4	0.082
Reverberatory Fur.9RF	1990	<del>188.4</del> <b>17.08</b>	<del>114.2</del> <b>17.08</b>	0	8.96	3.7	4.4	0.082
Reverberatory Fur.10RF	1990	<del>188.4</del> <b>17.08</b>	<del>114.2</del> <b>17.08</b>	0	8.96	3.7	4.4	0.082
Pangborn Shotblast machine DC1	1968	<del>53.64</del> <b>&lt; 25</b>	<del>5.36</del> <b>&lt; 15</b>	0	0	0	0	8.28
Mesh Belt Shotblast machine DC2	1997	<del>12.54</del> <b>&lt; 25</b>	<del>1.25</del> <b>&lt; 15</b>	0	0	0	0	9.66
Mesh Belt Shotblast machine DC6	1997	<del>12.54</del> <b>&lt; 25</b>	<del>1.25</del> <b>&lt; 15</b>	0	0	0	0	9.66
Tumbleblast Shotblast machine DC5	2000	<del>14.89</del> <b>&lt; 25</b>	<del>1.49</del> <b>&lt; 15</b>	0	0	0	0	2.3
Wire Mesh machine DC4	1999	<del>19.52</del> <b>&lt; 25</b>	<del>1.95</del> <b>&lt; 15</b>	0	0	0	0	10.05
Wire Mesh machine DC7	2005	<del>6.54</del> <b>&lt; 25</b>	<del>0.65</del> <b>&lt; 15</b>	0	0	0	0	10.05
Wire Mesh machine DC8	2005	<del>6.54</del> <b>&lt; 25</b>	<del>0.65</del> <b>&lt; 15</b>	0	0	0	0	10.05
Boiler 1BLR	1964	0.8	3.2	0.2	2.3	35	41.6	0.78
Boiler 2BLR	1964	0.7	2.7	0.21	2	29.9	35.6	0.67
Boiler 3BLR	2000	0.6	2.6	0.2	1.9	28.7	34.1	0.77
Emergency Generator		0.5	0.5	2.8	0.5	3.9	16.9	0
Insignificant Activities		4.51	4.51	0	0	0	0	0
<b>Total Emissions</b>		<del>2057.96</del> <b>&gt; 250</b>	<del>1198.51</del> <b>&gt; 250</b>	3.81	103.83	142.5	181.8	63.258

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

Technical Support Document (TSD) for a Part 70 Operating Permit Renewal

**Source Background and Description**

<b>Source Name:</b>	Chrysler LLC - Kokomo Casting Plant
<b>Source Location:</b>	1001 East Boulevard, Kokomo, Indiana 46904
<b>County:</b>	Howard
<b>SIC Code:</b>	3363
<b>Permit Renewal No.:</b>	T067-25272-00065
<b>Permit Reviewer:</b>	Josiah Balogun

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from Chrysler LLC - Kokomo Casting Plant relating to the operation of an aluminum die cast facility, including melt furnaces, machinery, cleaning and heat treating equipment to produce transmissions for use in automobiles and light-duty trucks.

**History**

On September 11, 2007, Chrysler LLC - Kokomo Casting Plant submitted applications to the OAQ requesting to renew its operating permit. Chrysler LLC - Kokomo Casting Plant was issued a Part 70 Operating Permit on June 6, 2003.

**Permitted Emission Units and Pollution Control Equipment**

- (a) one (1) natural gas-fired aluminum stack melting furnace, identified as SM1 with a maximum melt/remelt capacity of four and four tenths (4.4) tons per hour, constructed in 2008, with a maximum heat input capacity of 10.93 million British thermal units per hour, with emissions uncontrolled and exhausting to stack 1SM;
- (b) one (1) natural gas-fired aluminum stack melting furnace, identified as SM2 with a maximum melt/remelt capacity of four and four tenths (4.4) tons per hour, constructed in 2008, with a maximum heat input capacity of 10.93 million British thermal units per hour, with emissions uncontrolled and exhausting to stack 3SM;
- (c) one (1) natural gas-fired aluminum reverberatory furnace, identified as 2RF with a maximum remelt capacity of thirty (30) tons per hour, constructed in 1984, with a maximum heat input capacity of 20 million British thermal units per hour, with emissions uncontrolled and exhausting to stacks 2RF and 2RCW;
- (d) one (1) natural gas-fired aluminum reverberatory furnace, identified as 4RF, constructed in 1998, with a maximum remelt capacity of 6.5 tons of scrap metal per hour and a maximum heat input capacity of 20 million British thermal units per hour, with emissions uncontrolled and exhausting to stacks 4RF and 4RCW;
- (e) one (1) natural gas-fired aluminum reverberatory furnace, identified as 6RF with a maximum remelt capacity of thirty (30) tons per hour, constructed in 1983, with a maximum heat input capacity of 20 million British thermal units per hour, with emissions uncontrolled and exhausting to stacks 6RF and 5RCW;

- (f) one (1) natural gas-fired aluminum reverberatory furnace, identified as 7RF with no remelt capability and a maximum average throughput of ten (10) tons per hour, constructed in 1995, with a maximum heat input capacity of 10 million British thermal units per hour, with emissions uncontrolled and exhausting to stack 7RF;
- (g) one (1) natural gas-fired aluminum reverberatory furnace, identified as 8RF with no remelt capability and a maximum average throughput of ten (10) tons per hour, constructed in 1995, with a maximum heat input capacity of 10 million British thermal units per hour, with emissions uncontrolled and exhausting to stack 8RF;
- (h) one (1) natural gas-fired aluminum reverberatory furnace, identified as 9RF with no remelt capability and a maximum average throughput of ten (10) tons per hour, constructed in 1998, with a maximum heat input capacity of 10 million British thermal units per hour, with emissions uncontrolled and exhausting to stack 9RF;
- (i) one (1) natural gas-fired aluminum reverberatory furnace, identified as 10RF, with no remelt capability and a maximum average throughput of ten (10) tons per hour, constructed in 1998, with a maximum heat input capacity of 10 million British thermal units per hour, with emissions uncontrolled and exhausting to stack 10RF;
- (j) one (1) Pangborn shotblast machine, identified as DC1, constructed in 1968, with a maximum shotblast rate of 72 tons per hour, with emissions controlled by a cartridge filter;
- (k) one (1) Mesh Belt shotblast machine, identified as DC2, constructed in 1997, with a maximum shotblast rate of 168,000 pounds per hour (84 ton per hour), with emissions controlled by a cartridge filter;
- (l) one (1) Mesh Belt shotblast machine, identified as DC6, constructed in 1997, with a maximum shotblast rate of 168,000 pounds per hour (84 ton per hour), with emissions controlled by a cartridge filter;
- (m) one (1) Tumbleblast shotblast machine, identified as DC5, constructed in 2000, with a maximum shotblast rate of 40,000 pounds per hour (20 ton per hour), with emissions controlled by cartridge filter;
- (n) one Wire Mesh machine used for deburring of parts, identified as DC4, constructed in 1999, with a maximum shotblast rate of 174,760 pounds per hour (87.38 ton per hour), with emissions controlled by a cartridge filter;
- (o) one (1) Wire Mesh machine used for deburring of parts, identified as DC7, constructed in 2005, with a maximum shotblast rate of 174,760 pounds per hour (87.38 ton per hour), with emissions controlled by a cartridge filter;
- (p) one (1) Wire Mesh machine used for deburring of parts, identified as DC8, constructed in 2005, with a maximum shotblast rate of 174,760 pounds per hour (87.38 ton per hour), with emissions controlled by a cartridge filter; and
- (q) one (1) natural gas-fired boiler, identified as 1BLR, constructed in 1964, with a maximum heat input capacity of 95 million British thermal units per hour, with emissions uncontrolled and exhausting to stack 1SB;
- (r) one (1) natural gas-fired boiler, identified as 2BLR, constructed in 1964, with a maximum heat input capacity of 81.26 million British thermal units per hour, with emissions uncontrolled and exhausting to stack 2SB;

- (s) one (1) natural gas-fired boiler, identified as 3BLR, constructed in 2000, with a maximum heat input capacity of 77.9 million British thermal units per hour, with emissions uncontrolled and exhausting to stack 3SB; and

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

There are no unpermitted emission units operating at this source during this review process.

### **Emission Units and Pollution Control Equipment Removed From the Source**

- (a) one (1) natural gas-fired aluminum reverberatory furnace, identified as 5RF with a maximum remelt capacity of thirty (30) tons per hour, constructed in 1978, with a maximum heat input capacity of 18 million British thermal units per hour, with emissions uncontrolled and exhausting to stack 5RF and 5RCW;
- (b) one (1) Rotoblast shotblast machine, identified as DC3, constructed in 1994, with a maximum shotblast rate of 88,350 pounds per hour, with emissions controlled by cartridge filter;
- (c) one (1) natural gas-fired aluminum reverberatory furnace, identified as 3RF, with a maximum remelt capacity of 1.5 tons per hour, constructed in 1997, with a maximum heat input capacity of 8 million British thermal units per hour, with emissions uncontrolled and exhausting to stack 3RF;
- (d) one (1) natural gas-fired aluminum reverberatory furnace, identified as 1ARF with a maximum remelt capacity of one (1) ton per hour and a maximum average throughput of one (1) ton per hour, constructed in 1988, with a maximum heat input capacity of 8 million British thermal units per hour, with emissions uncontrolled and exhausting to stack 1RF;
- (e) one (1) natural gas-fired aluminum reverberatory furnace, identified as 1BRF with a maximum remelt capacity of one (1) ton per hour and a maximum average throughput of one (1) ton per hour, constructed in 1988, with a maximum heat input capacity of 8 million British thermal units per hour, with emissions uncontrolled and exhausting to stack 1RF; and
- (f) one (1) paint booth, identified as MP1, constructed in 1988, with a maximum capacity of 0.386 gallons per hour, with emissions uncontrolled and exhausting to stack PV5.

### **Insignificant Activities**

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

- (a) die casting machines, identified as DCAST1, with emissions uncontrolled and exhausting internally;
- (b) trim machines, with emissions uncontrolled and exhausting internally;
- (c) waste water treatment plant operations, with a maximum treatment capacity of 150,000 gallons per day, with emissions uncontrolled;
- (d) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million Btu per hour;
- (e) Equipment powered by internal combustion engines of capacity equal to or less than 500,000 Btu per hour, except where total capacity of equipment operated by one stationary source exceeds 2,000,000 Btu per hour;

- (f) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons;
- (g) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids;
- (h) Refractory storage not requiring air pollution control equipment;
- (i) Application of oils, greases, lubricants or other nonvolatile materials applied as temporary protective coatings;
- (j) cleaners and solvents characterized as follows:
  - (1) having a vapor pressure equal to or less than 2 kilopascals; 15 mm Hg; or 0.3 psi measured at 38 C (100 F); or
  - (2) having a vapor pressure equal to or less than 0.7 kilopascal; 5 mm Hg; or 0.1 psi measured at 20 C (68 F); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months;
- (k) Machining where an aqueous cutting coolant continuously floods the machining interface;
- (l) The following equipment related to manufacturing activities not resulting in the emission of HAPs; brazing equipment, cutting torches, soldering equipment, welding equipment;
- (m) Closed loop heating and cooling systems;
- (n) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume;
- (o) any operation using aqueous solutions containing less than 1% by weight of VOCs excluding HAPs;
- (p) Noncontact cooling tower systems with natural draft cooling towers not regulated under a NESHAP;
- (q) Noncontact cooling tower systems with forced and induced draft cooling tower systems not regulated under a NESHAP;
- (r) Quenching operations used with heat treating processes;
- (s) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment;
- (t) Heat exchanger cleaning and repair;
- (u) Stockpiled soils from soil remediation activities that are covered and waiting transport for disposal;
- (v) Paved and unpaved roads and parking lots with public access;
- (w) Asbestos abatement projects regulated by 326 IAC 14-10;
- (x) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks,

- and fluid handling equipment;
- (y) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower;
- (z) Diesel emergency generators not exceeding 1600 horsepower;
  - (1) One (1) diesel fired emergency generator, with a maximum power output of 685 horsepower and maximum operating hours of 500 hrs/yr;
- (aa) One (1) diesel fired emergency generator with a maximum power output of 2,130 horsepower and maximum operating hours of 500 hrs/yr;
- (bb) Stationary fire pumps;
- (cc) a laboratory as defined in 326 IAC 2-7-1(21)(D); and
- (dd) 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 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; woodworking operations, tooling operations including dry grinding/sanding/cutting stations wet grinding stations using a maximum of 0.09 gallons of cutting oil per hour, with emissions controlled by a baghouse and exhausting internally.

### Existing Approvals

Since the issuance of the Part 70 Operating Permit T067-5246-00065 on June 30, 2003, the source has constructed or has been operating under the following approvals as well:

- (a) Significant Permit Modification T067-16788-00065, issued on July 8, 2003
- (b) Interim T067-17799I-00065, issued on July 28, 2003
- (c) Minor Source Modification T067-17799-00065, issued on September 16, 2003
- (d) Minor Permit Modification T067-17714-00065, issued on September 16, 2003
- (e) Minor Permit Modification T067-18500-00065, issued on May 18, 2004
- (f) Administrative Amendment T067-19500-00065, issued on August 19, 2004
- (g) Interim T067-19417I-00065, issued on August 20, 2004
- (h) Minor Source Modification T067-19417-00065, issued on November 23, 2004
- (i) Minor Permit Modification T067-19553-00065, issued on January 26, 2005
- (j) Administrative Amendment T067-20879-00065, issued on March 31, 2005
- (k) Significant Source Modification T067-19756-00065, issued on April 14, 2005
- (l) Significant Permit Modification T067-19555-00065, issued on April 29, 2005
- (m) Administrative Amendment T067-21602-00065, issued on September 30, 2005

- (n) Interim T067-21862I-00065, issued on October 26, 2005
- (o) Minor Source Modification T067-21840-00065, issued on November 10, 2005
- (p) Minor Permit Modification T067-21862-00065, issued on January 6, 2006;
- (q) Interim T067-22565I-00065, issued on February 1, 2006;
- (r) Significant Permit Modification T067-20936-00065, issued on February 20, 2006;
- (s) Significant Permit Modification T067-22771-00065, issued on July 11, 2006;
- (t) Significant Permit Modification T067-21686-00065, issued on July 11, 2006;
- (u) Significant Permit Modification T067-24440-00065, issued on May 25, 2007;
- (v) Administrative Amendment T067-24731-00065, issued on June 13, 2007;
- (w) Administrative Amendment T067-24730-00065, issued on July 2, 2007;
- (x) Administrative Amendment T067-25563-00065, issued on December 20, 2007;
- (y) Interim T067-25504I-00065, issued on December 21, 2007;
- (z) Significant Source Modification T067-25480-00065, issued on February 6, 2008; and
- (aa) Significant Permit Modification T067-25504-00065, issued on February 22, 2008.

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

#### **Enforcement Issue**

There are no enforcement actions pending.

#### **Emission Calculations**

The calculations submitted by the applicant have been verified and found to be accurate and correct. These calculations are provided in Appendix A of this document (1 through 37)

### County Attainment Status

The source is located in Howard 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 PM <sub>2.5</sub> .	

- (a) Howard County has been classified as unclassifiable or attainment for PM<sub>2.5</sub>. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM<sub>2.5</sub> emissions. Therefore, until the U.S.EPA adopts specific provisions for PSD review for PM<sub>2.5</sub> emissions, it has directed states to regulate PM<sub>10</sub> emissions as a surrogate for PM<sub>2.5</sub> emissions. See the State Rule Applicability – Entire Source section.
- (b) 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 emissions and NOx emissions are considered when evaluating the rule applicability relating to ozone. Howard County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions and NOx 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) Howard County has been classified as attainment or unclassifiable in Indiana for all criteria pollutants. Therefore, these 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.
- (d) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 revoking the one-hour ozone standard in Indiana.
- (e) Fugitive Emissions  
 Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are not counted toward determination of PSD or Emission Offset applicability.

### Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

Pollutant	tons/year
PM	> 250
PM <sub>10</sub>	> 250
SO <sub>2</sub>	< 250
VOC	< 250
CO	< 250
NO <sub>x</sub>	< 250

HAPs	tons/year
Chromium	greater than 10
Cobalt	less than 10
Nickel	greater than 10
Arsenic	less than 10
Cadmium	less than 10
Selenium	less than 10
Lead	greater than 10
Manganese	less than 10
Benzene	less than 10
Dicchlorobenzene	less than 10
Formaldehyde	less than 10
Hexane	less than 10
Toluene	less than 10
Total	greater than 25

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM<sub>10</sub>, VOC, CO and NO<sub>x</sub> are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of all other criteria pollutants are less than 100 tons per year.
- (c) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is equal to or greater than ten (10) tons per year and/or the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is equal to or greater than twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (d) Fugitive Emissions  
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-7, fugitive emissions are not counted toward the determination of Part 70 applicability.

### Part 70 Permit Conditions

This source is subject to the requirements of 326 IAC 2-7, pursuant to which the source has to meet the following:

- (a) Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance of Part 70 permits.
- (b) Monitoring and related record keeping requirements which assume that all reasonable information is provided to evaluate continuous compliance with the applicable requirements.

### Potential to Emit After Issuance

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 permit renewal, and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

Emission Unit	Potential to Emit						
	PM (tons/yr)	PM <sub>10</sub> (tons/yr)	SO <sub>2</sub> (tons/yr)	VOC (tons/yr)	CO (tons/yr)	NO <sub>x</sub> (tons/yr)	HAPs (tons/yr)
Two Stack Melting Furnaces (SM1 and SM2)	14.4	14.4	0.1	0.5	8	9.6	0.18
Reverb. Fur. 2RF	92.5	342.34	0.1	27.3	7.4	8.8	0.16
Reverb. Fur. 4RF	24.91	14.98	0.1	6.19	7.4	8.8	0.16
Reverb. Fur. 6RF	36.2	342.3	0.1	27.3	7.4	8.8	0.16
Reverb. Fur. 7RF	9.98	5.2	0	8.96	3.7	4.4	0.082
Reverb. Fur. 8RF	9.98	5.2	0	8.96	3.7	4.4	0.082
Reverb. Fur. 9RF	9.98	5.2	0	8.96	3.7	4.4	0.082
Reverb. Fur. 10RF	9.98	5.2	0	98.96	3.7	4.4	0.082
Pangborn Shotblast DC1	5361.12	536.11	0	0	0	0	8.28
Mesh Belt Shotblast DC2	12.5	1.24	0	0	0	0	9.66
Mesh Belt Shotblast DC6	12.5	1.24	0	0	0	0	9.66
Tumbleblast Shotblast DC5	14.8	1.48	0	0	0	0	2.3

Emission Unit	Potential to Emit						
	PM (tons/yr)	PM <sub>10</sub> (tons/yr)	SO <sub>2</sub> (tons/yr)	VOC (tons/yr)	CO (tons/yr)	NO <sub>x</sub> (tons/yr)	HAPs (tons/yr)
Wire mesh machine DC4	19.5	1.93	0	0	0	0	single < 9 and total < 24
Wire mesh machine DC7	6.5	0.6	0	0	0	0	single < 9 and total < 24
Wire mesh machine DC8	6.5	0.6	0	0	0	0	single < 9 and total < 24
Boiler 1BLR	0.8	3.2	0.2	2.3	35	41.6	0.78
Boiler 2BLR	0.7	2.7	0.21	2.0	29.9	35.6	0.67
Boiler 3BLR	0.6	2.6	0.2	1.9	28.7	34.1	0.77
Emergency Generator	0.5	0.5	2.8	0.5	3.9	16.9	0
Insignificant Activities	4.51	4.51	0	0	0	0	0
Total Emissions	> 250	> 250	3.81	103.8	142.5	181.8	single < 10 and total < 25

- (a) This existing stationary source is major for PSD because the emissions of at least one attainment pollutant are greater than two hundred fifty (>250) tons per year, and is not one of the twenty-eight (28) listed source categories.
- (b) Fugitive Emissions  
 Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3, fugitive emissions are not counted toward the determination of PSD and Emission Offset applicability.

**Federal Rule Applicability**

The following federal rules are applicable to the source:

- (a) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to existing emission units that involve a pollutant-specific emission unit and meet the following criteria:
  - (1) has a potential to emit before controls equal to or greater than the major source threshold for the pollutant involved;
  - (2) is subject to an emission limitation or standard for that pollutant; and
  - (3) uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.

The following table is used to identify the applicability of each of the criteria, under 40 CFR 64.1, to each existing emission unit and specified pollutant subject to CAM:

<b>Emission Unit / Pollutant</b>	<b>Control Device Used</b>	<b>Emission Limitation (Y/N)</b>	<b>Uncontrolled PTE (tons/year)</b>	<b>Controlled PTE (tons/year)</b>	<b>Major Source Threshold (tons/year)</b>	<b>CAM Applicable (Y/N)</b>	<b>Large Unit (Y/N)</b>
Stack melting furnace SM1 (PM10)	N	Y	6.91	6.91	100	N	N
Stack melting furnace SM2 (PM10)	N	Y	6.91	6.91	100	N	N
Reverb. Fur. 2RF (PM10)	N	Y	342.0	342.0	100	N	N
Reverb. Fur. 2RF (PM)	N	Y	565.0	565.0	100	N	N
Reverb. Fur. 4RF	N	Y	14.98	14.98	100	N	N
Reverb. Fur. 6RF (PM10)	N	Y	342.0	342.0	100	N	N
Reverb. Fur. 6RF (PM)	N	Y	565.0	565.0	100	N	N
Reverb. Fur. 7RF (PM10)	N	Y	114.2	114.2	100	N	N
Reverb. Fur. 8RF (PM10)	N	Y	114.2	114.2	100	N	N
Reverb. Fur. 9RF (PM10)	N	Y	114.2	114.2	100	N	N
Reverb. Fur. 10RF (PM10)	N	Y	114.2	114.2	100	N	N
Reverb. Fur. 7RF (PM)	N	Y	188.4	188.4	100	N	N
Reverb. Fur. 8RF (PM)	N	Y	188.4	188.4	100	N	N
Reverb. Fur. 9RF (PM)	N	Y	188.4	188.4	100	N	N
Reverb. Fur. 10RF (PM)	N	Y	188.4	188.4	100	N	N
Pangborn Shotblast DC1 (PM10)	Y	Y	5361.1	53.6	100	Y	N
Pangborn Shotblast DC1 (PM)	Y	Y	5361.1	5.36	100	Y	N
Mesh Belt Shotblast DC2 (PM10)	Y	Y	625.6	1.25	100	Y	N

<b>Emission Unit / Pollutant</b>	<b>Control Device Used</b>	<b>Emission Limitation (Y/N)</b>	<b>Uncontrolled PTE (tons/year)</b>	<b>Controlled PTE (tons/year)</b>	<b>Major Source Threshold (tons/year)</b>	<b>CAM Applicable (Y/N)</b>	<b>Large Unit (Y/N)</b>
Mesh Belt Shotblast DC2 (PM)	Y	Y	6254.6	12.51	100	Y	N
Mesh Belt Shotblast DC6 (PM10)	Y	Y	625.6	1.25	100	Y	N
Mesh Belt Shotblast DC6 (PM)	Y	Y	6254.6	12.51	100	Y	N
Tumbleblast Shotblast DC5 (PM10)	Y	Y	148.92	1.49	100	Y	N
Tumbleblast Shotblast DC5 (PM10)	Y	Y	1489.2	14.89	100	Y	N
Wire mesh machine DC4 (PM10)	Y	Y	650.63	1.95	100	Y	N
Wire mesh machine DC4 (PM)	Y	Y	6506.3	19.52	100	Y	N
Wire mesh machine DC7 (PM10)	Y	Y	650.63	0.65	100	Y	N
Wire mesh machine DC7 (PM)	Y	Y	6506.3	6.51	100	Y	N
Wire mesh machine DC8 (PM10)	Y	Y	650.63	0.65	100	Y	N
Wire mesh machine DC8 (PM)	Y	Y	6506.3	6.51	100	Y	N
Boiler 1BLR (PM10)	N	N	3.2	3.2	100	N	N
Boiler 2BLR (PM10)	N	N	2.7	2.7	100	N	N
Boiler 3BLR (PM10)	N	N	2.6	2.6	100	N	N

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are applicable to Pangborn shotblast machine (DC1), Mesh belt shotblast machine (DC2), Mesh belt shotblast machine (DC6), Tumbleblast shotblast machine (DC5), Wire Mesh machine (DC4) Wire Mesh machine (DC7) and Wire Mesh machine (DC8) for PM and PM10 upon issuance of the Title V Renewal. A CAM plan will be incorporated into this Part 70 permit renewal.

Emission Unit-Pollutant	Control Device Used	Emission Limitation (Y/N)	Uncontrolled PTE of HAP (tons/year)	Controlled PTE of HAP (tons/year)	Major Source Threshold (tons/year)	CAM Applicable (Y/N)	Large Unit (Y/N)
Stack melting furnace SM1	N	Y	single > 10, Total < 25	single > 10, Total < 25	10/25	N	N
Stack melting furnace SM2	N	Y	single > 10, Total < 25	single > 10, Total < 25	10/25	N	N
Reverb. Fur. 2RF	N	Y	single > 10, Total < 25	single > 10, Total < 25	10/25	N	N
Reverb. Fur. 10RF	N	Y	single > 10, Total < 25	single > 10, Total < 25	10/25	N	N
Pangborn Shotblast DC1(PM)	N	Y	single > 10, Total < 25	single > 10, Total < 25	10/25	N	N
Mesh Belt Shotblast DC2 (PM10)	N	Y	single > 10, Total < 25	single > 10, Total < 25	10/25	N	N
Mesh Belt Shotblast DC6 (PM)	N	Y	single > 10, Total < 25	single > 10, Total < 25	10/25	N	N
Tumbleblast Shotblast DC5 (PM10)	N	Y	single > 10, Total < 25	single > 10, Total < 25	10/25	N	N
Wire mesh machine DC4 (PM)	N	N	single > 10, Total < 25	single > 10, Total < 25	10/25	N	N
Wire mesh machine DC7 (PM10)	N	N	single > 10, Total < 25	single > 10, Total < 25	10/25	N	N
Wire mesh machine DC8 (PM10)	N	N	single > 10, Total < 25	single > 10, Total < 25	10/25	N	N

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are not applicable to any of the existing units for HAPs as part of this Part 70 permit renewal

- (a) 326 IAC 12 and 40 CFR 60, Subpart Dc-Standard of Performance for Small Industrial-Commercial Institutional Steam Generating Unit.

The boiler, identified as 3BLR is subject to the requirements of the New Source Performance Standard, 40 CFR 60, Subpart Dc, Standard of Performance for Small Industrial-Commercial Institutional Steam Generating Unit, because the boiler was

constructed in 2000, which is after June 9, 1989, which is the applicability date for this rule and the boiler has a heat input capacity of greater 10 million Btu/hour but less than 100 million Btu/hour. The specific facility subject to this rule includes the following.

- (1) one (1) natural gas-fired boiler, identified as 3BLR, constructed in 2000, with a maximum heat input capacity of 77.9 million British thermal units per hour, with emissions uncontrolled and exhausting to stack 3SB; and

The boiler, identified as 3BLR is subject to the following sections of 40 CFR Part 60, Subpart Dc.

- (1) 40 CFR 60.40c
  - (2) 40 CFR 60.41c
  - (3) 40 CFR 60.42c
  - (4) 40 CFR 60.43c
  - (5) 40 CFR 60.44c
  - (6) 40 CFR 60.45c
  - (7) 40 CFR 60.46c
  - (8) 40 CFR 60.47c and
  - (9) 40 CFR 60.48c
- (b) The requirements of the New Source Performance Standard for 326 IAC 12 and 40 CFR 60, Subpart Dc (Standard of Performance for Small Industrial-Commercial Institutional Steam Unit), are not included in the permit for the two (2) boilers, identified as 1BLR and , 2 BLR with a maximum capacity of 95 MMBtu/hr and 81.26 MMBtu/hr, respectively because construction of this unit commenced prior to June 9, 1989, which is the applicability date for this rule.
  - (c) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in this permit renewal.
  - (d) Pursuant to Significant Permit Modification No. 067-22771-00065, on July 11, 2006, the source has taken limits to be a minor source for HAPs.

#### HAPs Limits

- (1) Pursuant to Significant Permit Modification No. 067-22771-00065, issued on July 11, 2006 and revised by operating permit 067-25272-00065, the total metallic HAPs of the metals introduced into the reverberatory furnaces, identified as SM1, SM2 and 2RF, 4RF through 10RF shall not exceed one percent (1.0%), by weight with compliance determined at the end of each month. Compliance with this limit will make the source an area source of HAPs as defined by 40 CFR 63.2.
- (2) Pursuant to Significant Permit Modification No. 067-22771-00065, issued on July 11, 2006, the total metallic HAP content of the shot used by the shot blast machines and the wire mesh machines, identified as DC1, DC2, DC4, DC5, DC6, DC7 and DC8, shall not exceed 0.0125 pounds of total metallic HAPs per pound of shot with compliance determined at the end of each month. Compliance with this limit will make the source an area source of HAPs as defined by 40 CFR 63.2.

### State Rule Applicability - Entire Source

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

This source was constructed before 1977 and at that time it has the potential to emit of at least one regulated pollutant greater than 250 tons per year. Therefore the source was a major source for PSD in 1977, and it is not one of the twenty-eight (28) listed sources. This source is not a secondary metal production plant because it does not melt any scrap metal from outside the plant.

#### 1983 and 1984 Modification

Furnaces, identified as 2RF and 6RF were installed and operated pursuant to a Nonattainment New Source Review ("NNSR") construction permit issued by IDEM because Howard County was a designated PM nonattainment area, in 1983.

In 1983 and 1984, the "major modification" threshold for proposed projects to be constructed in designated PM nonattainment areas was 100 tons/year. Consequently, the NNSR construction permitting process was used to determine if the proposed PM emissions increases associated with Furnaces 2RF and 6RF constituted a "major modification" subject to stringent NNSR requirements, i.e. application of LAER, emission offsets. To avoid triggering NNSR requirements applicable to "major modifications," Chrysler accepted emission limits applicable to the operation of Furnaces 2RF and 6RF through the NNSR permitting process for those two furnaces. The emission limits from those NNSR Construction Permits were incorporated into the Indiana SIP provisions designed to return Howard County back to PM attainment status. Those NNSR permit and SIP limitations on the operations of Furnaces 2RF and 6RF are currently found at 326 IAC 6.5-5-2, even though Howard County no longer is a designated PM nonattainment area.

The furnaces, identified as 2RF and 6RF shall be subject to the following conditions:

- (a) The particulate matter (PM) emissions from the furnace, identified as 2RF shall not exceed 0.85 grains per dry standard cubic foot and 92.5 tons per year.
- (b) The particulate matter (PM) emissions from the furnace, identified as 6RF shall not exceed 0.63 grains per dry standard cubic foot and 36.2 tons per year.

Compliance with the above limits will limit the PM emissions from furnaces 2RF and 6RF to less than 100 tons per twelve (12) consecutive month period, each and will render 326 IAC 2-2 (PSD) and 326 IAC 2-1.1-5 (Nonattainment NSR) not applicable to the 1983 and 1984 modification.

#### 1995 Modification

The Reverberatory Furnaces, identified as 7RF and 8RF, constructed in 1995, have uncontrolled PM and PM<sub>10</sub> emissions greater than 25 and 15 tons per year, respectively. Pursuant to Operating Permit No. T067-5246-00065, issued on June 30, 2003 and revised by Operating permit No. T067-25272-00065. The total annual flux usage to the Reverberatory Furnaces, identified as 7RF and 8RF shall be less than 21,960 pounds per twelve (12) consecutive month period, with compliance determined at the end of each month. The total PM and PM<sub>10</sub> emissions due to flux usage from the stack melting furnaces, identified as 7RF and 8RF shall be less than 0.9 lb of PM/ lb of flux and 0.45 lb of PM<sub>10</sub> /lb of flux, each. Compliance with the limits above will limit the PM and PM<sub>10</sub> emissions to less than 25 and 15 tons per year, respectively and render the requirements of 326 IAC 2-2 not applicable to the 1995 modification.

#### 1997 Modification

The Mesh Belt Shotblast, identified as DC2 and Mesh Belt Shotblast, identified as DC6, both constructed in 1997 have uncontrolled PM and PM10 emissions greater than 25 and 15 tons per year, respectively. Pursuant to Minor Permit Modification No. T067-21862-00065 issued on January 6, 2006, the PM and PM10 emissions from the Mesh Belt Shotblasts, identified as DC2 and DC6 shall be less than 3.9 pounds per hour, combined and 1.62 pounds per hour, Combined. Compliance with the above limits will limit PM and PM10 emissions to less than 25 and 15 tons per year and render 326 IAC 2-2 (PSD) not applicable to the 1997 modification.

#### 1998 Modification

The Reverberatory Furnaces, identified as 9RF and 10RF, constructed in 1998, have uncontrolled PM and PM10 emissions greater than 25 and 15 tons per year, respectively. Pursuant to Operating Permit No. T067-5246-00065, issued on June 30, 2003 and revised by Operating permit No. T067-25272-00065. The total annual flux usage to the Reverberatory Furnaces, identified as 9RF and 10RF shall be less than 21,960 pounds per twelve (12) consecutive month period, each, with compliance determined at the end of each month. The total PM and PM<sub>10</sub> emissions due to flux usage from the stack melting furnaces, identified as 9RF and 10RF shall be less than 0.9 lb of PM/ lb of flux and 0.45 lb of PM<sub>10</sub> /lb of flux, each. Compliance with the limits above will limit the PM and PM10 emissions to less than 25 and 15 tons per year, respectively and render the requirements of 326 IAC 2-2 not applicable to the 1990 (1998) modification.

The Permittee did provide justification in its August 23, 2003 additional information letter to change the year of construction on some facilities. Also, Furnace 4RF was separated out of the 1998 modification because it was installed to replace the previous furnace 4 which was destroyed in an unforeseeable catastrophic failure.

Pursuant to Operating Permit No. T067-5246-00065, issued on June 30, 2003 and revised by Operating permit No. T067-25272-00065, the scrap metal throughput to the Reverberatory Furnace, identified as 4RF shall be less than 56940 tons of metal remelt per twelve (12) consecutive month period with compliance determined at the end of the month. Therefore, the total PM and PM<sub>10</sub> emissions from the Reverberatory Furnace, identified as 4RF, shall not exceed 0.875 and 0.525 pound per ton, respectively. Compliance with this limit, will limit the PM and PM<sub>10</sub> emissions from the Reverberatory Furnace, identified as 4RF to less than 25 and 15 tons per year, respectively and render 326 IAC 2-2 (PSD) not applicable to this emission unit.

#### 1999 Modification

The Mesh Belt Machine, identified as DC4 constructed in 1999 has uncontrolled PM and PM10 emissions greater than 25 and 15 tons per year, respectively. Pursuant to Minor Permit Modification No. T067-21862-00065 issued on January 6, 2006, the PM and PM10 emissions from the Mesh Belt Machine, identified as DC4 shall be less than 5.4 pounds per hour and 3.12 pounds per hour, respectively. Compliance with the above limits will limit PM and PM10 emissions to less than 25 and 15 tons per year and render 326 IAC 2-2 (PSD) not applicable to the 1999 modification.

#### 2000 Modification

The Tumbleblast Shotblast Machine, identified as DC5 constructed in 2000 has uncontrolled PM and PM10 emissions greater than 25 and 15 tons per year, respectively. Pursuant to Minor Permit Modification No. T067-21862-00065 issued on January 6, 2006, the PM and PM10 emissions from the Tumbleblast Shotblast Machine, identified as DC5 shall be less than 4.64 pounds per hour and 2.36 pounds per hour, respectively. Compliance with the above limits will limit PM and PM10 emissions to less than 25 and 15 tons per year and render 326 IAC 2-2 (PSD) not applicable to the 2000 modification.

#### 2005 Modification

The Wire Mesh Machine, identified as DC7 and Wire Mesh Machine, identified as DC8, both constructed in 2005 have uncontrolled PM and PM10 emissions greater than 25 and 15 tons per year, respectively. Pursuant to Minor Permit Modification No. T067-21862-00065 issued on January 6, 2006, the PM and PM10 emissions from the Wire Mesh Machine, identified as DC7 and Wire Mesh Machine, identified as DC8 shall be less than 2.85 pounds per hour, each and 1.71 pounds per hour, each. Compliance with the above limits will limit PM and PM10 emissions to less than 25 and 15 tons per year and render 326 IAC 2-2 (PSD) not applicable to the 2005 modification.

#### 2008 Modification

The uncontrolled PM<sub>10</sub> emissions from the stack melting furnaces, identified as SM1 and SM2 are more than 15 tons per year. Pursuant to the Significant Permit Modification No. 067-25504-00065, issued on February 22, 2008. The total metal melted/remelted to the two (2) stack melting furnaces, identified as SM1 and SM2 shall be less than 65,000 tons per twelve (12) consecutive month period, with compliance determined at the end of the month. The total PM<sub>10</sub> emissions from the stack melting furnaces, identified as SM1 and SM2 shall be less than 0.4 lb of PM<sub>10</sub>/ton of melting or remelting. The combined annual flux usage to the stack melting furnaces, identified as SM1 and SM2 shall be less than 21,900 pounds per twelve (12) consecutive month period, with compliance determined at the end of each month. The total PM<sub>10</sub> emissions due to flux usage from the stack melting furnaces, identified as SM1 and SM2 shall be less than 0.129 lb of PM<sub>10</sub> /lb of flux. Compliance with these limits will limit the PM<sub>10</sub> emissions from the two (2) stack melting furnaces, identified as SM1 and SM2 to less than 15 tons per year and render the requirements of 326 IAC 2-2 (PSD) not applicable to the 2008 Modification.

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

The source is subject to 326 IAC 2-6 (Emission Reporting) because it is required to have an operating permit under 326 IAC 2-7, Part 70 program and has the potential to emit greater than 100 tons per year of criteria pollutants. Pursuant to this rule, the Permittee shall triennially submit an emission statement for the source beginning in 2005 and every three years thereafter. The statement must be received by July 1 and contain the minimum requirements as specified in 326 IAC 2-6-4. The submittal should cover the period identified in 326 IAC 2-6-3(a).

#### 326 IAC 5-1 (Opacity Limitations)

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

### **State Rule Applicability – Individual Facilities**

326 IAC 6.5-5.2 (formerly 326 IAC 6-1-15) (County Specific Particulate Matter Limitations: Chrysler-Haynes)

Pursuant to 326 IAC 6.5-5-2, (formerly 326 IAC 6-1-15) (County Specific Particulate Matter Limitations: Chrysler-Haynes), the following conditions shall apply:

- (a) The particulate matter (PM) emissions from the furnace, identified as 2RF shall not exceed 0.85 grains per dry standard cubic foot and 92.5 tons per year.

- (b) The particulate matter (PM) emissions from the furnace, identified as 6RF shall not exceed 0.63 grains per dry standard cubic foot and 36.2 tons per year.

326 IAC 6.5-1-2 (Particulate emission limitations; fuel combustion steam generators, asphalt concrete plant, grain elevators, foundries, mineral aggregate operations)  
Pursuant to 326 IAC 6.5-1-2, (formerly 326 IAC 6-1-2), the particulate matter (PM) emissions from each of the furnaces, identified as SM1, SM2, 4RF, 7RF, 8RF, 9RF and 10RF shall not exceed 0.03 grains per dry standard cubic foot.

326 IAC 6.5-1-2 (Particulate emission limitations; fuel combustion steam generators, asphalt concrete plant, grain elevators, foundries, mineral aggregate operations)  
Pursuant to 326 IAC 5.5-1-2, (formerly 326 IAC 6-1-2), the particulate matter (PM) emissions from the cartridge filter controlling each of the shotblast machine, identified as DC1 (Pangborn shotblast machine), DC2 (Mesh belt shotblast machine), DC6 (Mesh belt shot machine), DC5 (Tumbleblast), DC4 (Wire mesh shotblast), DC7 (Wire mesh shotblast), DC8 (Wire mesh shotblast machine) shall not exceed 0.03 grains per dry standard cubic foot.

326 IAC 6.5-1-2 (Particulate emission limitations; fuel combustion steam generators, asphalt concrete plant, grain elevators, foundries, mineral aggregate operations)  
Pursuant to 326 IAC 6.5-1-2, (formerly 326 IAC 6-1-2), the particulate matter (PM) emissions from each of the emission units, die casting machines, trim operations, machining, brazing equipment, cutting torches, soldering equipment, welding equipment, stockpiled soil, grinding and machining operations shall not exceed 0.03 grains per dry standard cubic foot.

326 IAC 6.5-1-2 (Particulate emission limitations; fuel combustion steam generators, asphalt concrete plant, grain elevators, foundries, mineral aggregate operations)  
Pursuant to 326 IAC 6.5-1-2(3), (formerly 326 IAC 6-1-2), the particulate matter (PM) emissions from each of the boilers, identified as BLR1, BLR2 and BLR3 shall not exceed 0.01 grains per dry standard cubic foot.

### Testing Requirements

(a) PM and PM<sub>10</sub> Testing

Emission Units	Control Device	Next Test date	Pollutants	Frequency of testing
Reverb. Fur. 4RF	No control	Before August 2010	PM/PM <sub>10</sub>	Every five years
Either Reverb. Fur. 2RF or 6RF	No control	Before September 2009	PM	Every five years
Either SM1 or SM2 with fluxing	No control	Within 180 days after the startup (As stated in SPM 067-25504-00065)	PM <sub>10</sub>	Every five years
Either SM1 or SM2 without fluxing	No control	Within 180 days after the startup (As stated in SPM 067-25504-00065)	PM <sub>10</sub>	Every five years
Either Reverb. Fur. 7RF, 8RF, 9RF or 10RF during fluxing operations	No control	Within 180 after the startup	PM/PM <sub>10</sub>	Every five years
Pangborn Shot Blast Machine DC1	Cartridge Filter	Before June 2012	PM	Every five years
Wire Mesh Shot Blast Machine DC4	Cartridge Filter	Before April 2011	PM/PM <sub>10</sub>	Every five years
Wire Mesh Shot Blast Machine DC7 or DC8	one (1) Cartridge Filter	Before November 2008	PM/PM <sub>10</sub>	Every five years
Mesh Shotblast Machine DC2 and DC6 shall be tested simultaneously	Cartridge Filter	Before June 2012	PM/PM <sub>10</sub>	Every five years

(b) HAPs Testing

- (1) The Permittee shall test each pot of molten metal introduced into the stack melting/reverberatory furnaces to verify the individual metallic HAPs and the total metallic HAPs content of the molten metal of each pot, utilizing methods as approved by the Commissioner; or,
- (2) Provide vendor analysis of each pot of molten metal delivered that verifies the individual metallic HAPs and the total metallic HAPs content of the molten metal of each pot. The vendor analysis shall be conducted utilizing methods as approved by the Commissioner.

### 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 monitoring requirements applicable to this source are as follows

Facilities	Control	Parameter	Frequency	Range	Excursions and Exceedances
DC1, DC2 DC4, DC5, DC6, DC7 and DC8	Cartridge Filter	Water Pressure Drop	Daily	0.5 to 6.0 inches	Response Steps
		Visible Emissions		Normal-Abnormal	

### Recommendation

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

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

An application for the purposes of this review was received on September 11, 2007.

### Conclusion

The operation of this aluminum die cast facility, including melt furnaces, machinery, cleaning and heat treating equipment to produce transmissions for use in automobiles and light-duty trucks shall be subject to the conditions of the attached Part 70 Operating Permit Renewal No.T067-25272-00065.

**Appendix A: Emissions Calculations  
Emission Summary**

**Company Name:** Chrysler LLC - Kokomo Casting Plant  
**Address City IN Zip:** 1001 East Boulevard, Kokomo, Indiana 46904  
**Permit Number:** T067-25272-00065  
**Reviewer:** Josiah Balogun  
**Date:** 8-Oct-07

Uncontrolled Potential Emissions								
Emission Unit	Year of Construction	PM (tons/yr)	PM <sub>10</sub> (tons/yr)	SO <sub>2</sub> (tons/yr)	VOC (tons/yr)	CO (tons/yr)	NOx (tons/yr)	HAPs (tons/yr)
Two Stack Melting Furnaces (SM1 and SM2)	2007	15.44	15.94	0.1	0.5	8	9.6	0.18
Reverberatory Fur.2RF	1984	565.42	342.3	0.1	27.3	7.4	8.8	0.16
Reverberatory Fur.4RF	1998	24.91	14.98	0.1	6.19	7.4	8.8	0.16
Reverberatory Fur.6RF	1983	565.42	342.3	0.1	27.3	7.4	8.8	0.16
Reverberatory Fur.7RF	1995	188.4	114.2	0	8.96	3.7	4.4	0.082
Reverberatory Fur.8RF	1995	188.4	114.2	0	8.96	3.7	4.4	0.082
Reverberatory Fur.9RF	1990	188.4	114.2	0	8.96	3.7	4.4	0.082
Reverberatory Fur.10RF	1990	188.4	114.2	0	8.96	3.7	4.4	0.082
Pangborn Shotblast machine DC1	1968	5361.12	536.11	0	0	0	0	8.28
Mesh Belt Shotblast machine DC2	1997	6254.64	625.64	0	0	0	0	9.66
Mesh Belt Shotblast machine DC6	1997	6254.64	625.64	0	0	0	0	9.66
Tumbleblast Shotblast machine DC5	2000	1489.2	148.92	0	0	0	0	2.3
Wire Mesh machine DC4	1999	6506.31	650.63	0	0	0	0	10.05
Wire Mesh machine DC7	2005	6506.31	650.63	0	0	0	0	10.05
Wire Mesh machine DC8	2005	6506.31	650.63	0	0	0	0	10.05
Boiler 1BLR	1964	0.8	3.2	0.2	2.3	35	41.6	0.78
Boiler 2BLR	1964	0.7	2.7	0.21	2	29.9	35.6	0.67
Boiler 3BLR	2000	0.6	2.6	0.2	1.9	28.7	34.1	0.77
Emergency Generator		0.5	0.5	2.8	0.5	3.9	16.9	0
Insignificant Activities		4.51	4.51	0	0	0	0	0
Total Emissions		> 250	> 250	3.81	103.83	142.5	181.8	Single > 10 Total > 250

**Appendix A: Emissions Calculations  
Emission Summary**

**Company Name:** Chrysler LLC - Kokomo Casting Plant  
**Address City IN Zip:** 1001 East Boulevard, Kokomo, Indiana 46904  
**Permit Number:** T067-25272-00065  
**Reviewer:** Josiah Balogun  
**Date:** 8-Oct-07

Limited Potential Emissions								
Emission Unit	Year of Construction	PM (tons/yr)	PM <sub>10</sub> (tons/yr)	SO <sub>2</sub> (tons/yr)	VOC (tons/yr)	CO (tons/yr)	NOx (tons/yr)	HAPs (tons/yr)
Two Stack Melting Furnaces (SM1 and SM2)	2007	14.4	14.4	0.1	0.5	8	9.6	0.18
Reverberatory Fur.2RF	1984	92.5	342.34	0.1	27.3	7.4	8.8	0.16
Reverberatory Fur.4RF	1998	24.91	14.95	0.1	6.19	7.4	8.8	0.16
Reverberatory Fur.6RF	1983	36.2	228.4	0.1	27.3	7.4	8.8	0.16
Reverberatory Fur.7RF	1995	9.98	5.2	0	8.96	3.7	4.4	0.082
Reverberatory Fur.8RF	1995	9.98	5.2	0	8.96	3.7	4.4	0.082
Reverberatory Fur.9RF	1990	9.98	5.2	0	8.96	3.7	4.4	0.082
Reverberatory Fur.10RF	1990	9.98	5.2	0	8.96	3.7	4.4	0.082
Pangborn Shotblast machine DC1	1968	5361.12	536.11	0	0	0	0	8.28
Mesh Belt Shotblast machine DC2	1997			0	0	0	0	9.66
Mesh Belt Shotblast machine DC6	1997	17.1	7.1	0	0	0	0	9.66
Tumbleblast Shotblast machine DC5	2000	20.3	10.3	0	0	0	0	2.3
Wire Mesh machine DC4	1999	23.7	13.7	0	0	0	0	Single < 9 Total < 24
Wire Mesh machine DC7	2005	12.5	7.5	0	0	0	0	Single < 9 Total < 24
Wire Mesh machine DC8	2005	12.5	7.5	0	0	0	0	Single < 9 Total < 24
Boiler 1BLR	1964	0.8	3.2	0.2	2.3	35	41.6	0.78
Boiler 2BLR	1964	0.7	2.7	0.21	2	29.9	35.6	0.67
Boiler 3BLR	2000	0.6	2.6	0.2	1.9	28.7	34.1	0.77
Emergency Generator		0.5	0.5	2.8	0.5	3.9	16.9	0
Insignificant Activities		4.51	4.51	0	0	0	0	0
<b>Total Emissions</b>		> 250	> 250	3.81	103.83	142.5	181.8	Single less 10 Total less 25

**Appendix A: Emissions Calculations  
Emission Summary**

**Company Name:** Chrysler LLC - Kokomo Casting Plant  
**Address City IN Zip:** 1001 East Boulevard, Kokomo, Indiana 46904  
**Permit Number:** T067-25272-00065  
**Reviewer:** Josiah Balogun  
**Date:** 8-Oct-07

Controlled Potential Emissions								
Emission Unit	Year of Construction	PM (tons/yr)	PM <sub>10</sub> (tons/yr)	SO <sub>2</sub> (tons/yr)	VOC (tons/yr)	CO (tons/yr)	NOx (tons/yr)	HAPs (tons/yr)
Two Stack Melting Furnaces (SM1 and SM2)	2007	15.44	15.94	0.1	0.5	8	9.6	0.18
Reverberatory Fur.2RF	1984	565.42	342.34	0.1	27.3	7.4	8.8	0.16
Reverberatory Fur.4RF	1998	24.91	14.98	0.1	6.19	7.4	8.8	0.16
Reverberatory Fur.6RF	1983	565.42	342.34	0.1	27.3	7.4	8.8	0.16
Reverberatory Fur.7RF	1995	188.4	114.2	0	8.96	3.7	4.4	0.082
Reverberatory Fur.8RF	1995	188.4	114.2	0	8.96	3.7	4.4	0.082
Reverberatory Fur.9RF	1990	188.4	114.2	0	8.96	3.7	4.4	0.082
Reverberatory Fur.10RF	1990	188.4	114.2	0	8.96	3.7	4.4	0.082
Pangborn Shotblast machine DC1	1968	53.61	5.36	0	0	0	0	8.28
Mesh Belt Shotblast machine DC2	1997	12.51	1.25	0	0	0	0	9.66
Mesh Belt Shotblast machine DC6	1997	12.51	1.25	0	0	0	0	9.66
Tumbleblast Shotblast machine DC5	2000	14.89	1.49	0	0	0	0	2.3
Wire Mesh machine DC4	1999	19.52	1.95	0	0	0	0	10.05
Wire Mesh machine DC7	2005	6.51	0.65	0	0	0	0	10.05
Wire Mesh machine DC8	2005	6.51	0.65	0	0	0	0	10.05
Boiler 1BLR	1964	0.8	3.2	0.2	2.3	35	41.6	0.78
Boiler 2BLR	1964	0.7	2.7	0.21	2	29.9	35.6	0.67
Boiler 3BLR	2000	0.6	2.6	0.2	1.9	28.7	34.1	0.77
Emergency Generator		0.5	0.5	2.8	0.5	3.9	16.9	0
Insignificant Activities		4.51	4.51	0	0	0	0	0
<b>Total Emissions</b>		<b>2057.96</b>	<b>1198.51</b>	<b>3.81</b>	<b>103.83</b>	<b>142.5</b>	<b>181.8</b>	<b>63.258</b>

**Appendix A: Emission Calculations  
Reverberatory Furnace 2RF**

**Company Name:** Chrysler LLC - Kokomo Casting Plant  
**Plant Location:** 1001 East Boulevard, Kokomo, Indiana 46904  
**Permit Number:** T067-25272-00065  
**Permit Reviewer:** Josiah Balogun  
**Date:** 8-Oct-07

Process	Rate (tons Al/hr)	Pollutant	Ef (lb/ton produced)	Ebc (tons/yr)	Eac (tons/yr)	Type of Control	Control Efficiency (%)
Reverberatory Fur. 2RF	30	PM	0.39	51.25	51.25	None	None
		PM-10	0.39	51.25	51.25	None	None
		SO2	0.00	0.00	0.00		
		NOx	0.00	0.00	0.00		
		VOC	0.20	26.28	26.28		
		CO	0.00	0.00	0.00		

Methodology

Uncontrolled Emissions = Capacity (tons/hr)\*Emission Factor (lb/ton)\*8760hrs/yr \*1ton/2000lb

Controlled Emissions = Uncontrolled Emissions\*(1- Control Efficiency)

**Appendix A: Emission Calculations**

**Reverberatory Furnace 4RF**

**Company Name:** Chrysler LLC - Kokomo Casting Plant

**Plant Location:** 1001 East Boulevard, Kokomo, Indiana 46904

**Permit Number:** T067-25272-00065

**Permit Reviewer:** Josiah Balogun

**Date:** 8-Oct-07

Process	Rate (tons Al/hr)	Pollutant	Ef (lb/ton produced)	Ebc (tons/yr)	Eac (tons/yr)	Type of Control	Control Efficiency (%)
Reverberatory Fur. 4RF	6.5	PM	0.875	24.91	24.91	None	None
		PM-10	0.526	14.98	14.98	None	None
		SO2	0	0.00	0.00		
		NOx	0	0.00	0.00		
		VOC	0.2	5.69	5.69		
		CO	0	0.00	0.00		

Methodology

Uncontrolled Emissions = Capacity (tons/hr)\*Emission Factor (lb/ton)\*8760hrs/yr \*1ton/2000lb

Controlled Emissions = Uncontrolled Emissions\*(1- Control Efficiency)

Emission Factor supplied by the source.

**Appendix A: Emission Calculations**

**Reverberatory Furnace 6RF**

**Company Name:** Chrysler LLC - Kokomo Casting Plant  
**Plant Location:** 1001 East Boulevard, Kokomo, Indiana 46904  
**Permit Number:** T067-25272-00065  
**Permit Reviewer:** Josiah Balogun  
**Date:** 8-Oct-07

Process	Rate (tons/hr)	Pollutant	Ef (lb/ton produced)	Ebc (tons/yr)	Eac (tons/yr)	Type of Control	Control Efficiency (%)
Reverberator Fur. 6RF	30.0	PM	0.39	51.25	51.25	None	None
		PM-10	0.39	51.25	51.25	None	None
		SO2	0.00	0.00	0.00		
		NOx	0.00	0.00	0.00		
		VOC	0.20	26.28	26.28		
		CO	0.00	0.00	0.00		

Methodology

Uncontrolled Emissions = Capacity (tons/hr)\*Emission Factor (lb/ton)\*8760hrs/yr \*1ton/2000lb

Controlled Emissions = Uncontrolled Emissions\*(1- Control Efficiency)

**Appendix A: Emission Calculations**

**Reverberatory Furnace 6RF**

**Company Name:** Chrysler LLC - Kokomo Casting Plant  
**Plant Location:** 1001 East Boulevard, Kokomo, Indiana 46904  
**Permit Number:** T067-25272-00065  
**Permit Reviewer:** Josiah Balogun  
**Date:** 8-Oct-07

Process	Rate (tons/hr)	Pollutant	Ef (lb/ton produced)	Ebc (tons/yr)	Eac (tons/yr)	Type of Control	Control Efficiency (%)
Reverberator Fur. 7RF	10.0	PM	0.39	17.08	17.08	None	None
		PM-10	0.39	17.08	17.08	None	None
		SO2	0.00	0.00	0.00		
		NOx	0.00	0.00	0.00		
		VOC	0.20	8.76	8.76		
		CO	0.00	0.00	0.00		

Methodology

Uncontrolled Emissions = Capacity (tons/hr)\*Emission Factor (lb/ton)\*8760hrs/yr \*1ton/2000lb

Controlled Emissions = Uncontrolled Emissions\*(1- Control Efficiency)

**Appendix A: Emission Calculations**

**Reverberatory Furnace 6RF**

**Company Name:** Chrysler LLC - Kokomo Casting Plant  
**Plant Location:** 1001 East Boulevard, Kokomo, Indiana 46904  
**Permit Number:** T067-25272-00065  
**Permit Reviewer:** Josiah Balogun  
**Date:** 8-Oct-07

Process	Rate (tons/hr)	Pollutant	Ef (lb/ton produced)	Ebc (tons/yr)	Eac (tons/yr)	Type of Control	Control Efficiency (%)
Reverberator Fur. 8RF	10.0	PM	0.39	17.08	17.08	None	None
		PM-10	0.39	17.08	17.08	None	None
		SO2	0.00	0.00	0.00		
		NOx	0.00	0.00	0.00		
		VOC	0.20	8.76	8.76		
		CO	0.00	0.00	0.00		

Methodology

Uncontrolled Emissions = Capacity (tons/hr)\*Emission Factor (lb/ton)\*8760hrs/yr \*1ton/2000lb

Controlled Emissions = Uncontrolled Emissions\*(1- Control Efficiency)

**Appendix A: Emission Calculations**

**Reverberatory Furnace 9RF**

**Company Name:** Chrysler LLC - Kokomo Casting Plant  
**Plant Location:** 1001 East Boulevard, Kokomo, Indiana 46904  
**Permit Number:** T067-25272-00065  
**Permit Reviewer:** Josiah Balogun  
**Date:** 8-Oct-07

Process	Rate (tons/hr)	Pollutant	Ef (lb/ton produced)	Ebc (tons/yr)	Eac (tons/yr)	Type of Control	Control Efficiency (%)
Reverberator Fur. 9RF	10.0	PM	0.39	17.08	17.08	None	None
		PM-10	0.39	17.08	17.08	None	None
		SO2	0.00	0.00	0.00		
		NOx	0.00	0.00	0.00		
		VOC	0.20	8.76	8.76		
		CO	0.00	0.00	0.00		

Methodology

Uncontrolled Emissions = Capacity (tons/hr)\*Emission Factor (lb/ton)\*8760hrs/yr \*1ton/2000lb

Controlled Emissions = Uncontrolled Emissions\*(1- Control Efficiency)

**Appendix A: Emission Calculations**

**Reverberatory Furnace 6RF**

**Company Name:** Chrysler LLC - Kokomo Casting Plant

**Plant Location:** 1001 East Boulevard, Kokomo, Indiana 46904

**Permit Number:** T067-25272-00065

**Permit Reviewer:** Josiah Balogun

**Date:** 8-Oct-07

Process	Rate (tons/hr)	Pollutant	Ef (lb/ton produced)	Ebc (tons/yr)	Eac (tons/yr)	Type of Control	Control Efficiency (%)
Reverberator Fur. 10RF	10.0	PM	0.39	17.08	17.08	None	None
		PM-10	0.39	17.08	17.08	None	None
		SO2	0.00	0.00	0.00		
		NOx	0.00	0.00	0.00		
		VOC	0.20	8.76	8.76		
		CO	0.00	0.00	0.00		

Methodology

Uncontrolled Emissions = Capacity (tons/hr)\*Emission Factor (lb/ton)\*8760hrs/yr \*1ton/2000lb

Controlled Emissions = Uncontrolled Emissions\*(1- Control Efficiency)

**NOTE**

Remelt emissions for furnaces 2RF, 6RF, 7RF, 8RF, 9RF, and 10RF were calculated by the source.

Source used a PM/PM10 emission factor of 0.391 lbs/ton remelt for these furnaces.

Source states this emission factor is based on a stack test conducted in November 1999.

**Appendix A: Emission Calculations  
Stack melting (SM1)**

**Company Name:** Chrysler LLC - Kokomo Casting Plant  
**Plant Location:** 1001 East Boulevard, Kokomo, Indiana 46904  
**Permit Number:** T067-25272-00065  
**Permit Reviewer:** Josiah Balogun  
**Date:** 8-Oct-07

Process	Rate (tons/hr)	Pollutant	Ef (lb/ton produced)	Ebc (tons/yr)	Eac (tons/yr)	Type of Control	Control Efficiency (%)
Stack melting furnace	4.4	PM	0.391	6.91	6.91	None	0.00%
		PM-10	0.391	6.91	6.91	None	
		SO2	0.00	0.00	0.00		
		NOx	0.00	0.00	0.00		
		VOC	0.00	0.00	0.00		
		CO	0.00	0.00	0.00		

Methodology

Uncontrolled Emissions = Capacity (tons/hr)\*Emission Factor (lb/ton)\*8760hrs/yr \*1ton/2000lb

Controlled Emissions = Uncontrolled Emissions\*(1- Control Efficiency)

Emission Factor is based on stack testing performed on # 4 Furnace in 1999.

**Appendix A: Emission Calculations**

**Stack melting (SM2)**

**Company Name:** Chrysler LLC - Kokomo Casting Plant  
**Plant Location:** 1001 East Boulevard, Kokomo, Indiana 46904  
**Permit Number** T067-25272-00065  
**Permit Reviewer:** Josiah Balogun  
**Date** 3-Dec-07

Process	Rate (tons/hr)	Pollutant	Ef (lb/ton produced)	Ebc (tons/yr)	Eac (tons/yr)	Type of Control	Control Efficiency (%)
Stack melting Furnace	4.4	PM	0.391	6.91	6.91	none	none
		PM-10	0.391	6.91	6.91	none	none
		SO2	0	0.00	0.00		
		NOx	0	0.00	0.00		
		VOC	0	0.00	0.00		
		CO	0	0.00	0.00		

Methodology

Uncontrolled Emissions = Capacity (tons/hr)\*Emission Factor (lb/ton)\*8760hrs/yr \*1ton/2000lb

Controlled Emissions = Uncontrolled Emissions\*(1- Control Efficiency)

Emission Factor is based on stack testing performed on # 4 Furnace in 1999.

**Fluxing emission rate for both furnaces (per unit)**

3.88 lb/hr X 1/30 lb/flux = 0.129 lb /lb

21,900 lb/yr X 0.129 lb/lb X 1ton/2000 lb = 1.42 tons of flux/yr

**Appendix A: Emission Calculations  
Pangborn Shotblaster machine Dc1**

**Company Name:** Chrysler LLC - Kokomo Casting Plant  
**Plant Location:** 1001 East Boulevard, Kokomo, Indiana 46904  
**Permit Number:** T067-25272-00065  
**Permit Reviewer:** Josiah Balogun  
**Date:** 8-Oct-07

Process	Rate (tons /hr)	Pollutant	Ef (lb/ton produced)	Ebc (tons/yr)	Eac (tons/yr)	Type of Control	Control Efficiency (%)
Pangborn Shotblast machine DC1	72	PM	17.0	5361.12	21.44	Cartridge Filter	99.60%
		PM-10	1.70	536.11	2.14	Cartridge Filter	99.60%
		SO2	0.00	0.00	0.00		
		NOx	0.00	0.00	0.00		
		VOC	0.00	0.00	0.00		
		CO	0.00	0.00	0.00		
		Chromium	0.00646	2.0372	2.0372		
		Cobalt	0.00051	0.1608	0.1608		
		Nickel	0.01139	3.5920	3.5920		
		Arsenic	0.00221	0.6969	0.6969		
		Cadmium	0.00102	0.3217	0.3217		
		Selenium	0.00017	0.0536	0.0536		
		Lead	0.00450	1.4191	1.4191		

Methodology

Uncontrolled Emissions = Capacity (tons/hr)\*Emission Factor (lb/ton)\*8760hrs/yr \*1ton/2000lb

Controlled Emissions = Uncontrolled Emissions\*(1- Control Efficiency)

SCC # 3-04-003-40

**Appendix A: Emission Calculations**

**Mesh Belt Shotblast machine DC2**

**Company Name:** Chrysler LLC - Kokomo Casting Plant

**Plant Location:** 1001 East Boulevard, Kokomo, Indiana 46904

**Permit Number:** T067-25272-00065

**Permit Reviewer:** Josiah Balogun

**Date:** 8-Oct-07

Process	Rate (tons /hr)	Pollutant	Ef (lb/ton produced)	Ebc (tons/yr)	Eac (tons/yr)	Type of Control	Control Efficiency (%)
Mesh Belt Shotblast machine DC2	84	PM	17.00	6254.64	12.51	Cartridge Filter	99.80%
		PM-10	1.7000	625.46	1.25	Cartridge Filter	99.80%
		SO2	0.00	0.00	0.00		
		NOx	0.00	0.00	0.00		
		VOC	0.00	0.00	0.00		
		CO	0.00	0.00	0.00		
		Chromium	0.00646	2.3768	2.3768		
		Cobalt	0.00051	0.1876	0.1876		
		Nickel	0.01139	4.1906	4.1906		
		Arsenic	0.00221	0.8131	0.8131		
		Cadmium	0.00102	0.3753	0.3753		
		Selenium	0.00017	0.0625	0.0625		
		Lead	0.0045	1.6556	1.6556		

Methodology

Uncontrolled Emissions = Capacity (tons/hr)\*Emission Factor (lb/ton)\*8760hrs/yr \*1ton/2000lb

Controlled Emissions = Uncontrolled Emissions\*(1- Control Efficiency)

SCC # 3-04-003-40

**Appendix A: Emission Calculations**

**Mesh Belt Shotblast machine DC6**

**Company Name:** Chrysler LLC - Kokomo Casting Plant

**Plant Location:** 1001 East Boulevard, Kokomo, Indiana 46904

**Permit Number:** T067-25272-00065

**Permit Reviewer:** Josiah Balogun

**Date:** 8-Oct-07

Process	Rate (tons /hr)	Pollutant	Ef (lb/ton produced)	Ebc (tons/yr)	Eac (tons/yr)	Type of Control	Control Efficiency (%)
Mesh Belt Shotblast machine DC6	84.0	PM	17.00	6254.64	12.51	Cartridge Filter	99.80%
		PM-10	1.7000	625.46	1.251	Cartridge Filter	99.80%
		SO2	0.00	0.00	0.00		
		NOx	0.00	0.00	0.00		
		VOC	0.00	0.00	0.00		
		CO	0.00	0.00	0.00		
		Chromium	0.00646	2.3768	2.3768		
		Cobalt	0.00051	0.1876	0.1876		
		Nickel	0.01139	4.1906	4.1906		
		Arsenic	0.00221	0.8131	0.8131		
		Cadmium	0.00102	0.3753	0.3753		
		Selenium	0.00017	0.0625	0.0625		
		Lead	0.0045	1.6556	1.6556		

Methodology

Uncontrolled Emissions = Capacity (tons/hr)\*Emission Factor (lb/ton)\*8760hrs/yr \*1ton/2000lb

Controlled Emissions = Uncontrolled Emissions\*(1- Control Efficiency)

SCC # 3-04-003-40

**Appendix A: Emission Calculations**  
**Tumbleblast Shotblast machine DC5**

**Company Name:** Chrysler LLC - Kokomo Casting Plant  
**Plant Location:** 1001 East Boulevard, Kokomo, Indiana 46904  
**Permit Number:** T067-25272-00065  
**Permit Reviewer:** Josiah Balogun  
**Date:** 8-Oct-07

Process	Rate (tons/hr)	Pollutant	Ef (lb/ton produced)	Ebc (tons/yr)	Eac (tons/yr)	Type of Control	Control Efficiency (%)
Tumbleblast Shotblast machine DC5	20.0	PM	17.00	1489.20	14.89	Cartridge Filter	99.00%
		PM <sub>10</sub>	1.7000	148.92	1.49	Cartridge Filter	99.00%
		SO <sub>2</sub>	0.00	0.00	0.00		
		NO <sub>x</sub>	0.00	0.000	0.000		
		VOC	0.00	0.00	0.00		
		CO	0.00	0.00	0.00		
		Chromium	0.00646	0.5659	0.5659		
		Cobalt	0.00051	0.0447	0.0447		
		Nickel	0.01139	0.9978	0.9978		
		Arsenic	0.00221	0.1936	0.1936		
		Cadmium	0.00102	0.0894	0.0894		
		Selenium	0.00017	0.0149	0.0149		
		Lead	0.0045	0.3942	0.3942		

Methodology

Uncontrolled Emissions = Capacity (tons/hr)\*Emission Factor (lb/ton)\*8760hrs/yr \*1ton/2000lb

Controlled Emissions = Uncontrolled Emissions\*(1- Control Efficiency)

SCC # 3-04-003-40

**Appendix A: Emission Calculations  
Wire Mesh Machine DC4**

**Company Name:** Chrysler LLC - Kokomo Casting Plant  
**Plant Location:** 1001 East Boulevard, Kokomo, Indiana 46904  
**Permit Number:** T067-25272-00065  
**Permit Reviewer:** Josiah Balogun  
**Date:** 8-Oct-07

Process	Rate (tons /hr)	Pollutant	Ef (lb/ton produced)	Ebc (tons/yr)	Eac (tons/yr)	Type of Control	Control Efficiency (%)
Wire Mesh machine DC4	87.38	PM	17.00	6506.31	19.52	Cartridge Filter	99.70%
		PM-10	1.70	650.63	1.95	Cartridge Filter	99.70%
		SO2	0.00	0.00	0.00		
		NOx	0.00	0.00	0.00		
		VOC	0.00	0.00	0.00		
		CO	0.00	0.00	0.00		
		Chromium	0.00646	2.47240	2.47		
		Cobalt	0.00051	0.19519	0.20		
		Nickel	0.01139	4.35923	4.36		
		Arsenic	0.00221	0.84582	0.85		
		Cadmium	0.00102	0.39038	0.39		
		Selenium	0.00017	0.06506	0.07		
		Lead	0.00450	1.72226	1.72		

Methodology

Uncontrolled Emissions = Capacity (tons/hr)\*Emission Factor (lb/ton)\*8760hrs/yr \*1ton/2000lb

Controlled Emissions = Uncontrolled Emissions\*(1- Control Efficiency)  
 SCC # 3-04-003-40

**Appendix A: Emission Calculations**

**Wire Mesh machine DC7**

**Company Name:** Chrysler LLC - Kokomo Casting Plant

**Plant Location:** 1001 East Boulevard, Kokomo, Indiana 46904

**Permit Number:** T067-25272-00065

**Permit Reviewer:** Josiah Balogun

**Date:** 8-Oct-07

Process	Rate (tons/hr)	Pollutant	Ef (lb/ton produced)	Ebc (tons/yr)	Eac (tons/yr)	Type of Control	Control Efficiency (%)
Wire Mesh machine DC7	87.38	PM	17.00	6506.31	6.51	Cartridge Filter	99.90%
		PM-10	1.70	650.63	0.65	Cartridge Filter	99.90%
		SO2	0.00	0.00	0.00		
		NOx	0.00	0.00	0.00		
		VOC	0.00	0.00	0.00		
		CO	0.00	0.00	0.00		
		Chromium	0.00646	2.4724	2.4724		
		Cobalt	0.00051	0.1952	0.1952		
		Nickel	0.01139	4.3592	4.3592		
		Arsenic	0.00221	0.8458	0.8458		
		Cadmium	0.00102	0.3904	0.3904		
		Selenium	0.00017	0.0651	0.0651		
		Lead	0.00450	1.7223	1.7223		

SCC # 3-04-003-40

Methodology

Uncontrolled Emissions = Capacity (tons/hr)\*Emission Factor (lb/ton)\*8760hrs/yr \*1ton/2000lb

**Appendix A: Emission Calculations****Wire mesh machine DC 8****Company Name:** Chrysler LLC - Kokomo Casting Plant**Plant Location:** 1001 East Boulevard, Kokomo, Indiana 46904**Permit Number:** T067-25272-00065**Permit Reviewer:** Josiah Balogun**Date:** 8-Oct-07

Process	Rate (tons /hr)	Pollutant	Ef (lb/ton produced)	Ebc (tons/yr)	Eac (tons/yr)	Type of Control	Control Efficiency (%)
Wire mesh machine DC8	87.38	PM	17.00	6506.31	6.51	Cartridge Filter	99.90%
		PM-10	1.70	650.63	0.65	Cartridge Filter	99.90%
		SO2	0.00	0.00	0.00		
		NOx	0.00	0.00	0.00		
		VOC	0.00	0.00	0.00		
		CO	0.00	0.00	0.00		
		Chromium	0.00646	2.47	2.47		
		Cobalt	0.00051	0.20	0.20		
		Nickel	0.01139	4.36	4.36		
		Arsenic	0.00221	0.85	0.85		
		Cadmium	0.00102	0.39	0.39		
		Selenium	0.00017	0.07	0.07		
		Lead	0.00450	1.72	1.72		

## Methodology

$$\text{Uncontrolled Emissions} = \text{Capacity (tons/hr)} * \text{Emission Factor (lb/ton)} * 8760 \text{hrs/yr} * 1 \text{ton}/2000 \text{lb}$$

$$\text{Controlled Emissions} = \text{Uncontrolled Emissions} * (1 - \text{Control Efficiency})$$

SCC # 3-04-003-40

**Appendix A: Emissions Calculations  
Natural Gas Combustion Only  
MM BTU/HR <100  
Boiler 1BLR**

**Company Name:** Chrysler LLC - Kokomo Casting Plant  
**Address City IN Zip:** 1001 East Boulevard, Kokomo, Indiana 46904  
**Permit Number:** T067-25272-00065  
**Reviewer:** Josiah Balogun  
**Date:** 8-Oct-07

Heat Input Capacity  
MMBtu/hr

Potential Throughput  
MMCF/yr

95.0

832.2

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.8	3.2	0.2	41.6	2.3	35.0

\*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

\*\*Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

**Methodology**

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

See page 19 for HAPs emissions calculations.

**Appendix A: Emissions Calculations  
 Natural Gas Combustion Only  
 MM BTU/HR <100  
 Boiler 1BLR  
 HAPs Emissions**

**Company Name:** Chrysler LLC - Kokomo Casting Plant  
**Address City IN Zip:** 1001 East Boulevard, Kokomo, Indiana 46904  
**Permit Number:** T067-25272-00065  
**Reviewer:** Josiah Balogun  
**Date:** 8-Oct-07

HAPs - Organics					
Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	8.738E-04	4.993E-04	3.121E-02	7.490E-01	1.415E-03

HAPs - Metals					
Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emission in tons/yr	2.081E-04	4.577E-04	5.825E-04	1.581E-04	8.738E-04

Methodology is the same as page 18.

The five highest organic and metal HAPs emission factors are provided above.  
 Additional HAPs emission factors are available in AP-42, Chapter 1.4.

**Appendix A: Emissions Calculations  
Natural Gas Combustion Only  
MM BTU/HR <100  
Boiler 2BLR**

**Company Name:** Chrysler LLC - Kokomo Casting Plant  
**Address City IN Zip:** 1001 East Boulevard, Kokomo, Indiana 46904  
**Permit Number:** T067-25272-00065  
**Reviewer:** Josiah Balogun  
**Date:** 8-Oct-07

Heat Input Capacity  
MMBtu/hr

Potential Throughput  
MMCF/yr

81.3

711.8

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.7	2.7	0.21	35.6	2.0	29.9

\*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

\*\*Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

**Methodology**

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

See page 21 for HAPs emissions calculations.

**Appendix A: Emissions Calculations  
 Natural Gas Combustion Only  
 MM BTU/HR <100  
 Boiler 2BLR  
 HAPs Emissions**

**Company Name:** Chrysler LLC - Kokomo Casting Plant  
**Address City IN Zip:** 1001 East Boulevard, Kokomo, Indiana 46904  
**Permit Number:** T067-25272-00065  
**Reviewer:** Josiah Balogun  
**Date:** 8-Oct-07

HAPs - Organics					
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	7.474E-04	4.271E-04	2.669E-02	6.407E-01	1.210E-03

HAPs - Metals					
	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	1.780E-04	3.915E-04	4.983E-04	1.352E-04	7.474E-04

Methodology is the same as page 20.

The five highest organic and metal HAPs emission factors are provided above.  
 Additional HAPs emission factors are available in AP-42, Chapter 1.4.

**Appendix A: Emissions Calculations  
Natural Gas Combustion Only  
MM BTU/HR <100  
Boiler 3BLR**

**Company Name:** Chrysler LLC - Kokomo Casting Plant  
**Address City In Zip:** 1001 East Boulevard, Kokomo, Indiana 46904  
**Permit Number:** T067-25272-00065  
**Reviewer:** Josiah Balogun  
**Date :** 8-Oct-07

Heat Input Capacity  
MMBtu/hr

Potential Throughput  
MMCF/yr

77.9

682.4

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0	5.5	84.0
Emission Factor in lb/MMCF				**see below		
Potential Emission in tons/yr	0.6	2.6	0.2	34.1	1.9	28.7

\*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

\*\*Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

**Methodology**

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

See page 23 for HAPs emissions calculations.

**Appendix A: Emissions Calculations  
 Natural Gas Combustion Only  
 MM BTU/HR <100  
 Boiler 3BLR  
 HAPs Emissions**

**Company Name:** Chrysler LLC - Kokomo Casting Plant  
**Address City IN Zip:** 1001 East Boulevard, Kokomo, Indiana 46904  
**Permit Number:** T067-25272-00065  
**Reviewer:** Josiah Balogun  
**Date:** 8-Oct-07

HAPs - Organics					
Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	7.165E-04	4.094E-04	2.559E-02	6.142E-01	1.160E-03

HAPs - Metals					
Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emission in tons/yr	1.706E-04	3.753E-04	4.777E-04	1.297E-04	7.165E-04

Total HAPs Emissions: 6.439E-01

Methodology is the same as page 22.

The five highest organic and metal HAPs emission factors are provided above.  
 Additional HAPs emission factors are available in AP-42, Chapter 1.4.

**Appendix A: Emissions Calculations  
Natural Gas Combustion Only  
MM BTU/HR <100**

**Stack melting Natural gas emissions**

**Company Name:** Chrysler LLC - Kokomo Casting Plant  
**Address City IN Zip:** 1001 East Boulevard, Kokomo, Indiana 46904  
**Permit Number:** T067-25272-00065  
**Reviewer:** Josiah Balogun  
**Date:** 8-Oct-07

Heat Input Capacity  
MMBtu/hr

Potential Throughput  
MMCF/yr

21.9

191.8

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Potential Emission in tons/yr	1.9	7.6	0.6	100.0 **see below	5.5	84.0
	0.2	0.7	0.1	9.6	0.5	8.1

\*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

\*\*Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

**Methodology**

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

See page 25 for HAPs emissions calculations.

**Appendix A: Emissions Calculations**  
**Natural Gas Combustion Only**  
**MM BTU/HR <100**  
**Stack melting Natural gas emissions**  
**HAPs Emissions**

**Company Name:** Chrysler LLC - Kokomo Casting Plant  
**Address City IN Zip:** 1001 East Boulevard, Kokomo, Indiana 46904  
**Permit Number:** T067-25272-00065  
**Reviewer:** Josiah Balogun  
**Date:** 8-Oct-07

HAPs - Organics					
Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	2.014E-04	1.151E-04	7.194E-03	1.727E-01	3.261E-04

HAPs - Metals					
Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emission in tons/yr	4.796E-05	1.055E-04	1.343E-04	3.645E-05	2.014E-04

Methodology is the same as page 24.

The five highest organic and metal HAPs emission factors are provided above.  
 Additional HAPs emission factors are available in AP-42, Chapter 1.4.

**Appendix A: Emissions Calculations  
 Natural Gas Combustion Only  
 MM BTU/HR <100  
 Reverberatory Furnace 2 RF**

**Company Name:** Chrysler LLC - Kokomo Casting Plant  
**Address City IN Zip:** 1001 East Boulevard, Kokomo, Indiana 46904  
**Permit Number:** T067-25272-00065  
**Reviewer:** Josiah Balogun  
**Date:** 8-Oct-07

Heat Input Capacity  
MMBtu/hr

Potential Throughput  
MMCF/yr

20.0
------

175.2

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.2	0.7	0.1	8.8	0.5	7.4

\*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

\*\*Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

**Methodology**

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

See page 27 for HAPs emissions calculations.

**Appendix A: Emissions Calculations**  
**Natural Gas Combustion Only**  
**MM BTU/HR <100**  
**Reverberatory Furnace 2 RF**  
**HAPs Emissions**

**Company Name:** Chrysler LLC - Kokomo Casting Plant  
**Address City IN Zip:** 1001 East Boulevard, Kokomo, Indiana 46904  
**Permit Number:** T067-25272-00065  
**Reviewer:** Josiah Balogun  
**Date:** 8-Oct-07

HAPs - Organics					
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	1.840E-04	1.051E-04	6.570E-03	1.577E-01	2.978E-04

HAPs - Metals					
	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	4.380E-05	9.636E-05	1.226E-04	3.329E-05	1.840E-04

Methodology is the same as page 26.

The five highest organic and metal HAPs emission factors are provided above.  
 Additional HAPs emission factors are available in AP-42, Chapter 1.4.

**Appendix A: Emissions Calculations  
Natural Gas Combustion Only  
MM BTU/HR <100  
Reverberatory Furnace 4 RF**

**Company Name:** Chrysler LLC - Kokomo Casting Plant  
**Address City IN Zip:** 1001 East Boulevard, Kokomo, Indiana 46904  
**Permit Number:** T067-25272-00065  
**Reviewer:** Josiah Balogun  
**Date:** 8-Oct-07

Heat Input Capacity  
MMBtu/hr

Potential Throughput  
MMCF/yr

20.0

175.2

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.2	0.7	0.1	8.8	0.5	7.4

\*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

\*\*Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

**Methodology**

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

See page 29 for HAPs emissions calculations.

**Appendix A: Emissions Calculations**  
**Natural Gas Combustion Only**  
**MM BTU/HR <100**  
**Reverberatory Furnace 4 RF**  
**HAPs Emissions**

**Company Name:** Chrysler LLC - Kokomo Casting Plant  
**Address City IN Zip:** 1001 East Boulevard, Kokomo, Indiana 46904  
**Permit Number:** T067-25272-00065  
**Reviewer:** Josiah Balogun  
**Date:** 8-Oct-07

	HAPs - Organics				
Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	1.840E-04	1.051E-04	6.570E-03	1.577E-01	2.978E-04

	HAPs - Metals				
Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emission in tons/yr	4.380E-05	9.636E-05	1.226E-04	3.329E-05	1.840E-04

Methodology is the same as page 28.

The five highest organic and metal HAPs emission factors are provided above.  
 Additional HAPs emission factors are available in AP-42, Chapter 1.4.

**Appendix A: Emissions Calculations  
 Natural Gas Combustion Only  
 MM BTU/HR <100  
 Reverberatory Furnace 6RF**

**Company Name:** Chrysler LLC - Kokomo Casting Plant  
**Address City IN Zip:** 1001 East Boulevard, Kokomo, Indiana 46904  
**Permit Number:** SSM067-25480-00065  
**Reviewer:** Josiah Balogun  
**Date:** 3-Dec-07

Heat Input Capacity  
MMBtu/hr

Potential Throughput  
MMCF/yr

20.0

175.2

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Potential Emission in tons/yr	1.9	7.6	0.6	100.0 **see below	5.5	84.0
	0.2	0.7	0.1	8.8	0.5	7.4

\*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

\*\*Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

**Methodology**

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

See page 31 for HAPs emissions calculations.

**Appendix A: Emissions Calculations**  
**Natural Gas Combustion Only**  
**MM BTU/HR <100**  
**Reverberatory Furnace 6RF**  
**HAPs Emissions**

**Company Name:** Chrysler LLC - Kokomo Casting Plant  
**Address City IN Zip:** 1001 East Boulevard, Kokomo, Indiana 46904  
**Permit Number:** SSM067-25480-00065  
**Reviewer:** Josiah Balogun  
**Date:** 3-Dec-07

HAPs - Organics					
Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	1.840E-04	1.051E-04	6.570E-03	1.577E-01	2.978E-04

HAPs - Metals					
Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emission in tons/yr	4.380E-05	9.636E-05	1.226E-04	3.329E-05	1.840E-04

Methodology is the same as page 30.

The five highest organic and metal HAPs emission factors are provided above.  
 Additional HAPs emission factors are available in AP-42, Chapter 1.4.

**Appendix A: Emissions Calculations  
Natural Gas Combustion Only  
MM BTU/HR <100  
Reverberatory Fur. 7RF**

**Company Name:** Chrysler LLC - Kokomo Casting Plant  
**Address City IN Zip:** 1001 East Boulevard, Kokomo, Indiana 46904  
**Permit Number:** T067-25272-00065  
**Reviewer:** Josiah Balogun  
**Date:** 8-Oct-07

Heat Input Capacity  
MMBtu/hr

Potential Throughput  
MMCF/yr

10.0

87.6

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.1	0.3	0.0	4.4	0.2	3.7

\*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

\*\*Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

**Methodology**

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

See page 33 for HAPs emissions calculations.

**Appendix A: Emissions Calculations**  
**Natural Gas Combustion Only**  
**MM BTU/HR <100**  
**Reverberatory Fur. 7RF**  
**HAPs Emissions**

**Company Name:** Chrysler LLC - Kokomo Casting Plant  
**Address City IN Zip:** 1001 East Boulevard, Kokomo, Indiana 46904  
**Permit Number:** T067-25272-00065  
**Reviewer:** Josiah Balogun  
**Date:** 8-Oct-07

HAPs - Organics					
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	9.198E-05	5.256E-05	3.285E-03	7.884E-02	1.489E-04

HAPs - Metals					
	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	2.190E-05	4.818E-05	6.132E-05	1.664E-05	9.198E-05

Methodology is the same as page 32.

The five highest organic and metal HAPs emission factors are provided above. Additional HAPs emission factors are available in AP-42, Chapter 1.4.

**Appendix A: Emissions Calculations  
 Natural Gas Combustion Only  
 MM BTU/HR <100  
 Reverberatory Fur. 8RF**

**Company Name:** Chrysler LLC - Kokomo Casting Plant  
**Address City IN Zip:** 1001 East Boulevard, Kokomo, Indiana 46904  
**Permit Number:** T067-25272-00065  
**Reviewer:** Josiah Balogun  
**Date:** 8-Oct-07

Heat Input Capacity  
MMBtu/hr

Potential Throughput  
MMCF/yr

10.0

87.6

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.1	0.3	0.0	4.4	0.2	3.7

\*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

\*\*Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

**Methodology**

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

See page 35 for HAPs emissions calculations.

**Appendix A: Emissions Calculations**  
**Natural Gas Combustion Only**  
**MM BTU/HR <100**  
**Reverberatory Fur. 8RF**  
**HAPs Emissions**

**Company Name:** Chrysler LLC - Kokomo Casting Plant  
**Address City IN Zip:** 1001 East Boulevard, Kokomo, Indiana 46904  
**Permit Number:** T067-25272-00065  
**Reviewer:** Josiah Balogun  
**Date:** 8-Oct-07

HAPs - Organics					
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	9.198E-05	5.256E-05	3.285E-03	7.884E-02	1.489E-04

HAPs - Metals					
	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	2.190E-05	4.818E-05	6.132E-05	1.664E-05	9.198E-05

Methodology is the same as page 34.

The five highest organic and metal HAPs emission factors are provided above. Additional HAPs emission factors are available in AP-42, Chapter 1.4.

**Appendix A: Emissions Calculations  
Natural Gas Combustion Only  
MM BTU/HR <100  
Reverberatory Fur. 9RF**

**Company Name:** Chrysler LLC - Kokomo Casting Plant  
**Address City IN Zip:** 1001 East Boulevard, Kokomo, Indiana 46904  
**Permit Number:** T067-25272-00065  
**Reviewer:** Josiah Balogun  
**Date:** 8-Oct-07

Heat Input Capacity  
MMBtu/hr

Potential Throughput  
MMCF/yr

10.0

87.6

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.1	0.3	0.0	4.4	0.2	3.7

\*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

\*\*Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

**Methodology**

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

See page 37 for HAPs emissions calculations.

**Appendix A: Emissions Calculations  
 Natural Gas Combustion Only  
 MM BTU/HR <100  
 Reverberatory Fur. 9RF  
 HAPs Emissions**

**Company Name:** Chrysler LLC - Kokomo Casting Plant  
**Address City IN Zip:** 1001 East Boulevard, Kokomo, Indiana 46904  
**Permit Number:** T067-25272-00065  
**Reviewer:** Josiah Balogun  
**Date:** 8-Oct-07

HAPs - Organics					
Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	9.198E-05	5.256E-05	3.285E-03	7.884E-02	1.489E-04

HAPs - Metals					
Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emission in tons/yr	2.190E-05	4.818E-05	6.132E-05	1.664E-05	9.198E-05

Methodology is the same as page 36.

The five highest organic and metal HAPs emission factors are provided above.  
 Additional HAPs emission factors are available in AP-42, Chapter 1.4.

**Appendix A: Emissions Calculations  
Natural Gas Combustion Only  
MM BTU/HR <100  
Reverberatory Fur. 10RF**

**Company Name:** Chrysler LLC - Kokomo Casting Plant  
**Address City IN Zip:** 1001 East Boulevard, Kokomo, Indiana 46904  
**Permit Number:** T067-25272-00065  
**Reviewer:** Josiah Balogun  
**Date:** 8-Oct-07

Heat Input Capacity  
MMBtu/hr

Potential Throughput  
MMCF/yr

10.00

87.6

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.1	0.3	0.0	4.4	0.2	3.7

\*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

\*\*Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

**Methodology**

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

See page 39 for HAPs emissions calculations.

**Appendix A: Emissions Calculations**  
**Natural Gas Combustion Only**  
**MM BTU/HR <100**  
**Reverberatory Fur. 10RF**  
**HAPs Emissions**

**Company Name:** Chrysler LLC - Kokomo Casting Plant  
**Address City IN Zip:** 1001 East Boulevard, Kokomo, Indiana 46904  
**Permit Number:** T067-25272-00065  
**Reviewer:** Josiah Balogun  
**Date:** 8-Oct-07

HAPs - Organics					
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	9.198E-05	5.256E-05	3.285E-03	7.884E-02	1.489E-04

HAPs - Metals					
	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	2.190E-05	4.818E-05	6.132E-05	1.664E-05	9.198E-05

Methodology is the same as page 38.

The five highest organic and metal HAPs emission factors are provided above. Additional HAPs emission factors are available in AP-42, Chapter 1.4.

**Appendix A Emission Calculation  
 Insignificant Activities (Grinding and machining Opreation)  
 Uncontrolled Emissions**

**Company Name:** Chrysler LLC - Kokomo Casting Plant  
**Address City IN Zip:** 1001 East Boulevard, Kokomo, Indiana 46904  
**Permit Number:** T067-25272-00065  
**Reviewer:** Josiah Balogun  
**Date:** 8-Oct-07

Particulate Emissions (tons/yr)			
	Grain Loading (gr/dscf)	Air Flow Rate (scfm)	PM/PM <sub>10</sub> Emissions (tons/yr)
Emission Unit			
Grinding and Machining Operation	0.03	4000	4.51

Methodology

Uncontrolled PM/PM<sub>10</sub> Emissions (tons/yr) = Grain Loading (gr/dscf) x Air Flow rate (scfm) x 60 min/hr x lb/7000 x 8760/2000



**Appendix A: Emissions Calculations  
HAPs Emissions Summary**

**Company :** Chrysler LLC - Kokomo Transmission Plant  
2401 S Reed Road, Kokomo, IN 46904

**Company:** Chrysler LLC - Kokomo Casting Plant  
1001 E. Boulevard, Kokomo, IN 46904

**Permit Number:** 067-25272-00065

**Reviewer:** Josiah Balogun

**Date:** 8-Oct-07

Source	Limited Potential to Emit - Kokomo Casting Plant	HAPs Emissions (tons/yr)
natural gas-fired reverberatory furnaces including remelt and fluxing where applicable	Natural gas emissions based on AP-42 at 8760 hrs/yr. Remelt and Fluxing Emissions based on either remelt capacity at 8760 hrs/yr or limited remelt capacity.	3.93
boilers	Based on AP-42 at 8760 hrs/yr.	2.13
Shotblasters	Based on existing PM emission limits and the assumption that the % HAP composition of the shot is representative of the % HAP composition of the PM	1.55
Maint. Painting, and cleaning	Based on actual usage from TRI, no recordkeeping or reporting at this time - may need to add recordkeeping and reporting when the two permit merge.	0.04
Emergency Generators	Based on AP-42 and 500 hrs/yr	1.11

Source	Limited Potential to Emit - Kokomo Transmission Plant	HAPs Emissions (tons/yr)
Boilers and all NG fired units	Based on AP-42 EF (same f/all types of NG combustion), of 1.89 lb HAP/mmscf. Recordkeeping and Reporting Requirements for limit of 3,852 mmscf NG/yr.	3.64
Fire Pumps & WWT Back-up pump	Based on AP-42 and 500 hrs/yr Based on AP-42 and 8760 hrs/yr	1.31
dynamometer test cells DYNA 8 and DYNA 9	Based on AP-42 and existing limited gas throughput of 190,000 gal/yr	1.29
dynamometer test cells dyna, segment ID 1	Based on AP-42 and existing limited gas throughput of 613,200 gal/yr	3.79
Shotblasters	Based on existing PM emission limits and the assumption that the % HAP composition of the shot is representative of the % HAP composition of the PM	2.47
Metal Cleaning	Limited to 6.87 tpy HAP input as only 15% volatilizes	1.02
Maintenance Painting Ink Usage	Based on Historical Usage	2.5
Diesel & Gas AST	per EPA Tanks program	0.127
<b>Total</b>		<b>24.91</b>