

**PART 70 OPERATING PERMIT
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
and
CITY OF INDIANAPOLIS
OFFICE OF ENVIRONMENTAL SERVICES**

**Daimler Chrysler Corporation - Indianapolis Foundry
1100 South Tibbs Avenue
Indianapolis, Indiana 46241**

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

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

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

Operation Permit No.: T097-6485-00012	
Issued by:	Issuance Date: June 29, 2004
Original signed by Janet G. McCabe, Assistant Commissioner Office of Air Quality	
Original signed by John Chavez, Administrator Office of Environmental Services	Expiration Date: June 29, 2009

TABLE OF CONTENTS

A	SOURCE SUMMARY	7
A.1	General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]	
A.2	Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)]	
A.3	Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]	
A.4	Part 70 Permit Applicability [326 IAC 2-7-2]	
B	GENERAL CONDITIONS	11
B.1	Definitions [326 IAC 2-7-1]	
B.2	Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5]	
B.3	Enforceability [326 IAC 2-7-7]	
B.4	Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]	
B.5	Severability [326 IAC 2-7-5(5)]	
B.6	Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]	
B.7	Duty to Provide Information [326 IAC 2-7-5(6)(E)]	
B.8	Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]	
B.9	Annual Compliance Certification [326 IAC 2-7-6(5)]	
B.10	Preventive Maintenance Plan [326 IAC 2-7-5(1),(3)and (13)][326 IAC 2-7-6(1)and(6)] [326 IAC 1-6-3]	
B.11	Emergency Provisions [326 IAC 2-7-16]	
B.12	Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]	
B.13	Prior Permits Superseded [326 IAC 2-1.1-9.5]	
B.14	Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]	
B.15	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]	
B.16	Permit Renewal [326 IAC 2-7-4]	
B.17	Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12]	
B.18	Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12 (b)(2)]	
B.19	Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]	
B.20	Source Modification Requirement [326 IAC 2-7-10.5]	
B.21	Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2][IC 13-30-3-1]	
B.22	Transfer of Ownership or Operational Control [326 IAC 2-7-11]	
B.23	Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][326 IAC 2-1.1-7]	
B.24	Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314]	
C	SOURCE OPERATION CONDITIONS	22
	Emission Limitations and Standards [326 IAC 2-7-5(1)]	
C.1	Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [40 CFR 52 Subpart P][326 IAC 6-3-2]	
C.2	Opacity [326 IAC 5-1]	
C.3	Open Burning [326 IAC 4-1] [IC 13-17-9]	
C.4	Incineration [326 IAC 4-2] [326 IAC 9-1-2]	
C.5	Fugitive Dust Emissions [326 IAC 6-4]	
C.6	Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]	
C.7	Operation of Equipment [326 IAC 2-7-6(6)]	
C.8	Stack Height [326 IAC 1-7]	
C.9	Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]	
	Testing Requirements [326 IAC 2-7-6(1)]	
C.10	Performance Testing [326 IAC 3-6]	
	Compliance Requirements [326 IAC 2-1.1-11]	
C.11	Compliance Requirements [326 IAC 2-1.1-11]	

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

- C.12 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]
- C.13 Monitoring Methods [326 IAC 3][40 CFR 60] [40 CFR 63]
- C.14 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11]
[326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

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

- C.15 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]
- C.16 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]
- C.17 Compliance Response Plan - Preparation, Implementation, Records, and Reports
[326 IAC 2-7-5] [326 IAC 2-7-6]
- C.18 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]
[326 IAC 2-7-6]

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

- C.19 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)]
[326 IAC 2-6]
- C.20 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]
- C.21 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

Stratospheric Ozone Protection

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

D.1 FACILITY OPERATION CONDITIONS - Cupola Melt System 30

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

- D.1.1 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]
- D.1.2 National Emissions Standards for Hazardous Air Pollutants for Iron and Steel Foundries
[40 CFR Part 63, Subpart EEEEE]
- D.1.3 Carbon Monoxide Limitation [326 IAC 9-1-2] [CP 0970012-04]
- D.1.4 VOC Limitation [326 IAC 2-2][CP 0970012-04][326 IAC 9-1-2][326 IAC 8-1-6]
- D.1.5 PM-10 Limitations [326 IAC 2-2][CP 0970012-04]
- D.1.6 Sulfur Dioxide Limitation [326 IAC 2-2]
- D.1.7 Particulate Matter Limitations [326 IAC 6-1-2]
- D.1.8 Lead Limitation [326 IAC 2-2]
- D.1.9 Carbon Monoxide (CO) Limitation [326 IAC 2-2]
- D.1.10 Nitrous Oxides (NO_x) Limitation [326 IAC 2-2]
- D.1.11 Beryllium Limitation [326 IAC 2-2]
- D.1.12 Cupola Melt System [CP 0970012-04]
- D.1.13 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

- D.1.14 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]
- D.1.15 Particulate Matter (PM)

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

- D.1.16 Visible Emissions Notations
- D.1.17 Parametric Monitoring for the Baghouses
- D.1.18 Baghouse and Cartridge Filter Inspections
- D.1.19 Broken or Failed Bag Detection
- D.1.20 Parametric Monitoring for the Afterburner

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

- D.1.21 National Emissions Standards for Hazardous Air Pollutants for Iron and Steel Foundries
- Notification Requirements [40 CFR 63, Subpart EEEEE]
- D.1.22 Requirement to Submit a Significant Permit Modification Application [326 IAC 2-7-12][326
IAC 2-7-5]

- D.1.23 Record Keeping Requirements
- D.1.24 Reporting Requirements

D.2 FACILITY OPERATION CONDITIONS - Impact Mold Line 39

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

- D.2.1 VOC Emissions [326 IAC 2-2-3] [326 IAC 2-7-6(3)] [326 IAC 2-7-15]
- D.2.2 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]
- D.2.3 National Emissions Standards for Hazardous Air Pollutants for Iron and Steel Foundries [40 CFR Part 63, Subpart EEEEE]
- D.2.4 Particulate Matter (PM) [326 IAC 2-2] [326 IAC 6-1-2][Permit 870012-3]
- D.2.5 Opacity [Permit 870012-3]
- D.2.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

- D.2.7 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]
- D.2.8 Particulate Matter (PM)

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

- D.2.9 Visible Emissions Notations
- D.2.10 Parametric Monitoring for Baghouses and Wet Scrubbers
- D.2.11 Baghouse Inspections
- D.2.12 Scrubber Inspections
- D.2.13 Broken or Failed Bag Detection
- D.2.14 Scrubber Failure Detection

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

- D.2.15 National Emissions Standards for Hazardous Air Pollutants for Iron and Steel Foundries - Notification Requirements [40 CFR 63, Subpart EEEEE]
- D.2.16 Requirement to Submit a Significant Permit Modification Application [326 IAC 2-7-12][326 IAC 2-7-5]
- D.2.17 Record Keeping Requirements

D.3 FACILITY OPERATION CONDITIONS - Block Shaking Process 46

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

- D.3.1 Particulate Matter (PM) Limitations [326 IAC 6-1-2(a)]
- D.3.2 Particulate Matter Limitations [326 IAC 2-2] [326 IAC 6-1-2][CP 097-12464-00012]
- D.3.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

- D.3.4 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]
- D.3.5 Particulate Matter (PM)

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

- D.3.6 Visible Emissions Notations
- D.3.7 Parametric Monitoring for Baghouses
- D.3.8 Baghouse and Cartridge Inspections
- D.3.9 Broken or Failed Bag Detection

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

- D.3.10 Record Keeping Requirements
- D.3.11 Reporting Requirements

D.4 FACILITY OPERATION CONDITIONS - Cleaning Department 49

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

- D.4.1 Particulate Matter (PM) [326 IAC 2-2][326 IAC 6-1-2][CP 0980012-01][CP 880012-5]
- D.4.2 Particulate Matter (PM) [326 IAC 2-2][CP 0980012-01]
- D.4.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

- D.4.4 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]
- D.4.5 Particulate Matter (PM)

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

- D.4.6 Visible Emissions Notations
- D.4.7 Parametric Monitoring for Baghouses
- D.4.8 Baghouse and Cartridge Inspections
- D.4.9 Broken or Failed Bag Detection

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

- D.4.10 Record Keeping Requirements
- D.4.11 Reporting Requirements

D.5 FACILITY CONDITIONS - Core Room 53

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

- D.5.1 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]
- D.5.2 National Emissions Standards for Hazardous Air Pollutants for Iron and Steel Foundries [40 CFR Part 63, Subpart EEEEE]
- D.5.3 TEA Limitation [326 IAC 8-1-6] [CP-970012-03]
- D.5.4 VOC Limitation [326 IAC 2-2] [CP-970012-03]
- D.5.5 Particulate Matter (PM) [326 IAC 6-1-2]
- D.5.6 Particulate Emissions Limitations for Sources of Indirect Heating [326 IAC 6-2-4]
- D.5.7 Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units [326 IAC 12, 40 CFR 60, Subpart Dc]
- D.5.8 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

- D.5.9 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]
- D.5.10 Particulate Matter (PM)
- D.5.11 VOC and TEA

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

- D.5.12 Visible Emissions Notations
- D.5.13 Parametric Monitoring for Baghouses
- D.5.14 Baghouse Inspections
- D.5.15 Scrubber Inspections
- D.5.16 Broken or Failed Bag Detection
- D.5.17 Scrubber Failure Detection
- D.5.18 Parametric Monitoring for Acid Scrubbers

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

- D.5.19 National Emissions Standards for Hazardous Air Pollutants for Iron and Steel Foundries - Notification Requirements [40 CFR 63, Subpart EEEEE]
- D.5.20 Requirement to Submit a Significant Permit Modification Application [326 IAC 2-7-12][326 IAC 2-7-5]
- D.5.21 Record Keeping Requirements
- D.5.22 Reporting Requirements

D.6 FACILITY OPERATION CONDITIONS - Refuse Bunker Area 61

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

- D.6.1 Particulate Matter (PM) [326 IAC 6-1-2]

- D.6.2 Particulate Matter less than 10 Micron (PM10) [326 IAC 2-2][CP 960012-02]
- D.6.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

- D.6.4 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]
- D.6.5 Particulate Matter (PM)

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

- D.6.6 Visible Emissions Notations
- D.6.7 Parametric Monitoring for Baghouses
- D.6.8 Baghouse Inspections
- D.6.9 Broken or Failed Bag Detection

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

- D.6.10 Record Keeping Requirements

D.7 FACILITY OPERATION CONDITIONS - Insignificant Activities 64

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

- D.7.1 Particulate Matter Limitations [326 IAC 6-1-2]
- D.7.2 Volatile Organic Compounds (VOC)[326 IAC 8-3-2]
- D.7.3 Volatile Organic Compounds (VOC)[326 IAC 8-3-5]

Compliance Determination Requirements

- D.7.4 Particulate Matter (PM)

Certification	67
Emergency Occurrence Report	68
Quarterly Report	70
Quarterly Report	71
Quarterly Deviation and Compliance Monitoring Report	72
Attachment A (state rules adopted by reference)	74
Attachment B (Fugitive Dust Plan)	76

SECTION A

SOURCE SUMMARY

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

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

The Permittee owns and operates a grey iron foundry, including core making, metal melting, sand molding, cleaning and finishing of final cast pieces to produce engine block castings.

Responsible Official:	Plant Manager
Source Address:	1100 South Tibbs Avenue, Indianapolis, IN 46241
Mailing Address:	1100 South Tibbs Avenue, Indianapolis, IN 46241
General Source Phone #:	(317) 240-4861
SIC Code:	3321
County Location:	Marion
Source Location Status:	Nonattainment for ozone under the 8-hour standard
Source Status:	Part 70 Permit Program Major, under PSD and Emission Offset Rules and Nonattainment NSR; Major Source, Section 112 of the Clean Air Act 1 of 28 Source Categories

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

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

- (a) A cupola melt system consisting of:
- (1) One (1) cupola, identified as Unit 1N, installed in 1999, with a maximum capacity of 75 tons of melted metal per hour and an effective maximum capacity of 69.9 tons of melted metal per hour based on the most recent stack test for the cupola, using a natural gas fired 18 MMBtu/hr afterburner, identified as CE-2701, for CO and VOC control, and fabric filter baghouses, identified as CE-2720E and CE-2720W, for PM control, and exhausting to stack S-2720.
 - (2) One (1) electric induction holding furnace, identified as Unit 2N, installed in 1999, with a maximum capacity of 75 tons of melted metal per hour and an effective maximum capacity of 69.9 tons of melted metal per hour based on the most recent stack test for the cupola, using a cartridge filter Baghouses, identified as CE-1530, for PM control, and exhausting to stack S-1530.
 - (3) One (1) coke/limestone area (for introduction into the cupola), identified as Unit 3N, installed in 1996, with maximum capacities of 10.9 tons of coke per hour and 2 tons of limestone per hour, using two (2) baghouses, identified as CE-1527N and CE-1527 N&S, for PM control, and exhausting to stack S-1527.
- (b) One (1) Impact Mold Line, consisting of:
- (1) One (1) pouring/cooling line, consisting of two (2) pouring furnaces, and a mold cooling line, identified as Units 5a and 5b, installed in 1988, with a combined maximum capacity of 75 tons of melted metal per hour and an effective maximum capacity of 69.9 tons of melted metal per hour based on the most recent stack test for the cupola, using a fabric filter Baghouse, identified as CE-1502, as PM control, and exhausting to stack S-1502. (The emissions from the sand homogenizer and basement sand transfer shakers of the Green Sand System are also controlled by Unit CE-1502.)

- (2) One (1) Sand Handling System, consisting of sand handling conveyors/belts, mixers, bucket elevator, cooling drum and impact mold station, identified as Unit 4, installed in 1988, with a maximum capacity of 450 tons of sand per hour, using two (2) venturi type wet collectors, identified as CE-1501E and CE-1501W, for PM control, exhausting to stacks S-1501E and S-1501W.
 - (3) One (1) Punch-up/Push-off process, identified as Unit 26, installed in 1988, and Sand Screening/Bleed off, Unit 404, with a maximum capacity of 75 tons of melted metal per hour and an effective maximum capacity of 69.9 tons of melted metal per hour based on the most recent stack test for the cupola, using a fabric filter Baghouse, identified as CE-1504, as PM control, and exhausting to stack S-1504.
 - (4) One (1) Oscillating Shakeout Conveyor, identified as Unit 28, installed in 1988, with a maximum capacity of 75 tons of melted metal per hour and an effective maximum capacity of 69.9 tons of melted metal per hour based on the most recent stack test for the cupola, using two (2) fabric baghouses, CE-1503N, M, S, and CE 1595, as PM control, and exhausting to stacks S-1503, S-1504, and S-1595, respectively.
- (c) One (1) Block Shaking Process, consisting of three (3) shakers, identified as Unit 44, installed in 2001, each with a maximum capacity of 25 tons of castings per hour, using one (1) fabric filter Baghouse and one (1) cartridge filter Baghouse, identified as CE-1596 and CE-1520S, as PM control, and exhausting to stacks S-1596 and S-1520S.
- (d) One (1) Cleaning Department, consisting of:
- (1) One (1) Finishing Line A/System #1, identified as Unit 32, installed in 1999, with a maximum capacity of 37.5 tons of castings per hour, using two (2) fabric filter baghouses, identified as CE-1591 and CE-1592, as PM control, and exhausting to stacks S-1591 and S-1592.
 - (2) One (1) Finishing Line B/System #2, identified as Unit 33, installed in 1999, with a maximum capacity of 37.5 tons of castings per hour, using two (2) fabric filter baghouses, identified as CE-1593 and CE-1594, as PM control, and exhausting to stacks S-1593 and S-1594.
 - (3) One (1) Sprue Removal Process, identified as Unit 6, installed in 1998, with a maximum capacity of 1.1 tons of shakeout sand and a maximum capacity of 75 tons of melted metal per hour and an effective maximum capacity of 69.9 tons of melted metal per hour based on the most recent stack test for the cupola, using one (1) cartridge filter Baghouse, identified as CE-1513, as PM as control, and exhausting to stack S-1513.
- (e) One (1) Core Room, consisting of:
- (1) Four (4) sand storage silos/hoppers, identified as Units 41 through 44, with capacities of 150 tons per hour each, described as follows:
 - (A) Unit 41, installed in 1998, with 800 tons of sand storage capacity serving the Core Room West core making line/Line A-System #1, using one (1) filter cartridge Baghouse, CE-1586, as PM control, and exhausting to stack S-1586.
 - (B) Unit 42, installed in 1998, with 400 tons of sand storage capacity serving the Core Room West core making line/Line A-System #1, using one (1) filter cartridge Baghouse, CE-1582, as PM control, and exhausting to stack S-1582.
 - (C) Unit 43, installed in 1998, with 800 tons of sand storage capacity serving

- the Core Room East core making line/Line B-System #2, using one (1) filter cartridge Baghouse, CE-1583, as PM control, and exhausting to stack S-1583.
- (D) Unit 44, installed in 1998, with 400 tons of sand storage capacity serving the Core Room East core making line/Line B-System #2, using one (1) filter cartridge Baghouse, CE-1584, as PM control, and exhausting to stack S-1584.
- (2) One (1) sand transfer operation, identified as Unit 45, installed in 1998, with capacities of 150 tons per hour, using one (1) cartridge filter Baghouse, identified as CE-1586, as PM control, and exhausting to stack S-1586.
- (3) One (1) rail sand unloading operation, identified as Unit 46, installed in 1998, with capacities of 150 tons per hour, using one (1) cartridge filter Baghouse, identified as CE-1585, as PM control, and exhausting to stack S-1585.
- (4) Core Room West/Line A/System #1 core making line, identified as Unit 48A, installed in 1998, comprised of fourteen (14) coldbox machines, Unit 47 A, and fourteen (14) cold box mixers, with each combination of coldbox core making machine and coldbox sand mixer having a capacity of 5.06 tons of cores per hour and a maximum tea usage of 7.13 pounds per hour and maximum resin usage of 7.59 pounds per hour, and Unit 49A, OV1-8339 crank case oven rated at 13.5 MM Btu/hr, and unit 50A, OV2-8322 water jacket and valley core dry oven rated at 12 MM Btu/hr (neither of which are considered to be steam generating units under 40 CFR Subpart D, Da, Db, or Dc), with a combined System 1 & 2 sand core production rate of 298, 840 tons of cores per 12 consecutive month period which is equivalent to 34 tons of cores per hour, using:
- (A) an acid scrubber, identified as CE-8180W, installed in 1998, as TEA (triethylamine) control, and exhausting to stack S-8180W.
- (B) sand transfer belt within System #1, installed in 1998, having a combined capacity of 36 tons of sand per hour, using two (2) cartridge filter baghouses, CE-1581 and CE-1582, as PM control, exhausting to stacks S-1581 and S-1582.
- (5) Core Room East/Line B/System #2 core making line, identified as Unit 48B, installed in 1998, comprised of fifteen (15) coldbox machines, Unit 47 B, and fifteen (15) cold box mixers, each combination of coldbox core making machine and coldbox sand mixer with a maximum capacity of 5.06 tons of cores per hour and a maximum tea usage of 7.13 pounds per hour and maximum resin usage of 7.59 pounds per hour, and Unit 49B, OV1-8440 crank case oven rated at 13.5 MM Btu/hr, and unit 50B, OV2-8322 water jacket and valley core dry oven rated at 12 MM Btu/hr (neither of which are considered to be steam generating units under 40 CFR Subpart D, Da, Db, or Dc), with a combined System 1 & 2 sand core production rate of 298, 840 tons of cores per 12 consecutive month period which is equivalent to 34 tons of cores per hour, using:
- (A) an acid scrubber, identified as CE-8280E, installed in 1998, as TEA control (triethylamine), and exhausting to stack S-8280E.
- (B) sand transfer belt within System #1, installed in 1998, having a combined capacity of 36 tons of sand per hour, using two (2) cartridge filter baghouses, CE-1583 and CE-1584, as PM control, exhausting to stacks S-1583 and S-1584.
- (6) Two (2) natural gas fired boilers, identified as Units 1East and 2West, installed in 1998, each with a maximum capacity of ten (10) million Btu per hour (MMBtu/hr), exhausting to stacks S-1 East and S-2 West, respectively.

- (f) One (1) Refuse Bunker Area, identified as Unit 34, installed in 1995, with a capacity of 450 tons of waste sand per hour, using a fabric filter Baghouse, identified as CE-1522 as PM control, and exhausting to stack S-34.

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

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

- (a) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. [326 IAC 8-3-2] [326 IAC 8-3-5]
- (b) Paved and unpaved roads and parking lots with public access. (326 IAC 6-4)
- (c) Conveyors as follows:
 - (1) Covered conveyor for coal or coke conveying of less than or equal to 360 tons per day; (326 IAC 6-1-2)
 - (2) Covered conveyors for limestone conveying of less than or equal to 7,200 tons per day for sources other than mineral processing plants constructed after August 31, 1983. (326 IAC 6-1-2)
- (d) One (1) tray dump operation, identified as 44a, with a maximum capacity of twenty (20) tons of sand per hour, using a sliding tray design, baffles to minimize the height of the drop, and shrouding of the tray to control fugitive particulate matter, with PM emissions controlled by two (2) baghouses (for the shaker units), identified as CE-7 and CE-8, exhausting to stacks S-7 and S-8.) (326 IAC 6-1-2) Potential emissions before control are less than insignificant levels.

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

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

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

SECTION B GENERAL CONDITIONS

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

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

B.2 Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5]

This permit 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.

B.3 Enforceability [326 IAC 2-7-7]

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

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

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

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

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

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

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

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

- (a) The Permittee shall furnish to IDEM, OAQ, and OES within a reasonable time, any information that IDEM, OAQ, and OES 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, and OES copies of records required to be kept by this permit.
- (b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

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

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a 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.

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

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

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

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

and

Office of Environmental Services
Air Quality Management Section
2700 South Belmont Avenue
Indianapolis, Indiana 46221

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, and the OES 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, and the OES may require to determine the compliance status of the source.

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

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

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after

issuance of this permit, including the following information on each facility:

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

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

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

and

City of Indianapolis
Office of Environmental Services
2700 South Belmont Avenue
Indianapolis, Indiana 46227

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

- (b) The Permittee shall implement the PMPs, including any required record keeping, as necessary to ensure that failure to implement a PMP does not cause or contribute to an exceedance of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, and OES upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ, and OES . IDEM, OAQ, and OES 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 PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation, Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

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

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

- (2) The permitted facility was at the time being properly operated;
- (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, and the OES 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: 317-233-5674 (ask for Compliance Section)
Facsimile Number: 317-233-5967
Office of Environmental Services
Telephone Number: 317-327-?
Facsimile Number: 317-327-?

- (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, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Office of Environmental Services
Air Quality Management Section
2700 South Belmont Avenue
Indianapolis, Indiana 46221

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) IDEM, OAQ, and the OES 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, and the OES 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) Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

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

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

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

- (b) In addition to the nonapplicability determinations set forth in Sections D of this permit, the IDEM, OAQ has made the following determination regarding this source:

None of the core room drying ovens listed in Section A, Emission Units and Pollution Control Equipment Summary are subject to the requirements of 40 CFR 60, Subpart Dc because they are not considered to be steam generating units.
- (c) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, or the OES shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (d) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. 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.

- (e) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
 - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
 - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
 - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
 - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (f) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (g) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, or the OES has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (h) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, or the OES has issued the modification. [326 IAC 2-7-12(b)(8)]

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

- (a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either
 - (1) incorporated as originally stated,
 - (2) revised, or
 - (3) deletedby this permit.
- (b) All previous registrations and permits are superseded by this permit.

B.14 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

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

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

and

Office of Environmental Services
Air Quality Management Section
2700 South Belmont Avenue
Indianapolis, Indiana 46221

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

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] 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, or the OES 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, or the OES 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, or the OES at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, or the OES may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.16 Permit Renewal [326 IAC 2-7-4]

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

Request for renewal shall be submitted to:

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

and

Office of Environmental Services
Air Quality Management Section
2700 South Belmont Avenue
Indianapolis, Indiana 46221

- (b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]
- (1) A timely renewal application is one that is:
- (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
- (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and the OES on or before the date it is due.
- (2) If IDEM, OAQ, and the OES, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.
- (c) Right to Operate After Application for Renewal [326 IAC 2-7-3]
If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ, and the OES, 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, and the OES, any additional information identified as being needed to process the application.
- (d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)]
If IDEM, OAQ, and the OES fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

B.17 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

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

and

City of Indianapolis
Office of Environmental Services
2700 South Belmont Avenue
Indianapolis, Indiana 46227

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

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]
- (d) No permit amendment or modification is required for the addition, operation or removal of a nonroad engine, as defined in 40 CFR 89.2.

B.18 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)]
[326 IAC 2-7-12 (b)(2)]

- (a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.
- (b) Notwithstanding 326 IAC 2-7-12(b)(1) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

B.19 Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:
 - (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
 - (2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;
 - (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
 - (4) The Permittee notifies the:

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

and

Office of Environmental Services
Air Quality Management Section
2700 South Belmont Avenue
Indianapolis, Indiana 46221

and

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

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

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

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

B.20 Source Modification Requirement [326 IAC 2-7-10.5]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-7-10.5.

B.21 Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2][IC 13-30-3-1]

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, and OES, 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.22 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

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

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

and

Office of Environmental Services
Air Quality Management Section
2700 South Belmont Avenue
Indianapolis, Indiana 46221

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.23 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, and the OES 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, or the OES 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, I/M & Billing Section), to determine the appropriate permit fee.

B.24 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314]

Notwithstanding the conditions of this permit that state specific methods that may be used to demonstrate compliance with, or a violation of, applicable requirements, any person (including the Permittee) may also use other credible evidence to demonstrate compliance with, or a violation of, any term or condition of this permit.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

- C.1 **Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [40 CFR 52 Subpart P][326 IAC 6-3-2]**
- (a) Pursuant to 40 CFR 52 Subpart P, the particulate matter emissions from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.
- (b) Pursuant to 326 IAC 6-3-2(e)(2), the particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour. This condition is not federally enforceable.
- C.2 **Opacity [326 IAC 5-1]**
- Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:
- (a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.
- C.3 **Open Burning [326 IAC 4-1] [IC 13-17-9]**
- The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.
- C.4 **Incineration [326 IAC 4-2] [326 IAC 9-1-2]**
- The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2. 326 IAC 9-1-2 is not federally enforceable.
- C.5 **Fugitive Dust Emissions [326 IAC 6-4]**
- The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.
- C.6 **Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]**
- Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the plan submitted on June 24, 2002. The plan is included as Attachment B.
- C.7 **Operation of Equipment [326 IAC 2-7-6(6)]**
- Except as otherwise provided by statute or rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.
- C.8 **Stack Height [326 IAC 1-7]**

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

C.9 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, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

City of Indianapolis
Office of Environmental Services
2700 South Belmont Avenue
Indianapolis, Indiana 46227

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

- (e) Procedures for Asbestos Emission Control

The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

- (f) Demolition and renovation
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) Indiana Accredited Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.

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

C.10 Performance Testing [326 IAC 3-6]

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

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

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

and

Office of Environmental Services
Air Quality Management Section
2700 South Belmont Avenue
Indianapolis, Indiana 46221

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 and the OES not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, and the OES, if the source 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.11 Compliance Requirements [326 IAC 2-1.1-11]

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

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

C.12 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

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

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

and

Office of Environmental Services
Air Quality Management Section
2700 South Belmont Avenue
Indianapolis, Indiana 46221

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.13 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

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

C.14 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

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

- (c) The Preventive Maintenance Plan for the pH meter shall include calibration using known standards. The frequency of calibration shall be adjusted such that the typical error found at calibration is less than one pH point.
- (d) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

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

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

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 August 29, 1996.
- (b) Upon direct notification by IDEM, OAQ, and the OES, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level.
[326 IAC 1-5-3]

C.16 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]

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

C.17 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-7-5] [326 IAC 2-7-6]

- (a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, OAQ and the OES upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:
 - (1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected time frame for taking reasonable response steps.
 - (2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.
- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:
 - (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or
 - (2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.
 - (3) If the Permittee determines that additional response steps would necessitate that

the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.

- (4) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (c) The Permittee is not required to take any further response steps for any of the following reasons:
 - (1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for a minor permit modification to the permit, and such request has not been denied.
 - (3) An automatic measurement was taken when the process was not operating.
 - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.
- (e) The Permittee shall record all instances when, in accordance with Section D, response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

C.18 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 and 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.19 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)] [326 IAC 2-6]

- (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 purposes of Part 70 fee assessment.
- (b) The annual emission statement covers the twelve (12) consecutive month time period starting December 1 and ending November 30. The annual emission statement must be submitted to:
- Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015
- and
- City of Indianapolis
Office of Environmental Services
2700 South Belmont Avenue
Indianapolis, Indiana 46227
- The emission statement does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and OES on or before the date it is due.

C.20 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner or OES makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or OES 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.21 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

- (a) The source 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, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

City of Indianapolis
Office of Environmental Services
2700 South Belmont Avenue
Indianapolis, Indiana 46227

- (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, and OES on or before the date it is due.
- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

Stratospheric Ozone Protection

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

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

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

SECTION D.1 FACILITY OPERATION CONDITIONS

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

A cupola melt system consisting of:

- (1) One (1) cupola, identified as Unit 1N, installed in 1999, with a maximum capacity of 75 tons of melted metal per hour and an effective maximum capacity of 69.9 tons of melted metal per hour based on the most recent stack test for the cupola, using a natural gas fired 18 MMBtu/hr afterburner, identified as CE-2701, for CO and VOC control, and fabric filter baghouses, identified as CE-2720E and CE-2720W, for PM control, and exhausting to stack S-2720.
- (2) One (1) electric induction holding furnace, identified as Unit 2N, installed in 1999, with a maximum capacity of 75 tons of melted metal per hour and an effective maximum capacity of 69.9 tons of melted metal per hour based on the most recent stack test for the cupola, using a cartridge filter Baghouse, identified as CE-1530, for PM control, and exhausting to stack S-1530.
- (3) One (1) coke/limestone area (for introduction into the cupola), identified as Unit 3N, installed in 1996, with maximum capacities of 10.9 tons of coke per hour and 2 tons of limestone per hour, using two (2) baghouses, identified as CE-1527N and CE-1527 N&S, for PM control, and exhausting to stack S-1527.

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

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

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

- (a) The provisions of 40 CFR 63 Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the iron foundry except when otherwise specified in 40 CFR 63 Subpart EEEEE. The Permittee must comply with these requirements on and after the effective date of 40 CFR 63 Subpart EEEEE.
- (b) Since the applicable requirements associated with the compliance options are not included and specifically identified in this permit, the permit shield authorized by the B section of this permit in the condition titled Permit Shield, and set out in 326 IAC 2-7-15 does not apply to paragraph (a) of this condition.

D.1.2 National Emissions Standards for Hazardous Air Pollutants for Iron and Steel Foundries [40 CFR Part 63, Subpart EEEEE]

- (a) The affected source, the iron foundry, is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Iron and Steel Foundries, (40 CFR 63, Subpart EEEEE), effective the date the rule is published in the Federal Register. Pursuant to this rule, the Permittee must comply with 40 CFR 63, Subpart EEEEE on and after the date that is three years after the effective date of the rule, except as provided in paragraph (d), or accept and meet an enforceable HAP emissions limit below the major source threshold prior to three years after the effective date of the rule. Since the applicable requirements associated with the compliance options are not included and specifically identified in this permit, the permit shield authorized by the B section of this permit in the condition titled Permit Shield, and set out in 326 IAC 2-7-15 does not apply to paragraph (a) of this condition.
- (b) The following emissions units comprise the affected source that is subject to 40 CFR 63, Subpart EEEEE:

- (1) one (1) cupola, identified as Unit 1N; and
 - (2) one (1) electric induction holding furnace, identified as Unit 2N; and
 - (3) fugitive emissions from each building or structure housing any emission source at the foundry.
- (c) The definitions of 40 CFR 63, Subpart EEEEE at 40 CFR 63.7765 are applicable to the affected source.
- (d) Pursuant to 40 CFR 63.7700(a) and 40 CFR 63.7683(b), the Permittee shall comply with the certification requirements in 40 CFR 63.7700(b) or prepare and implement a plan for the selection and inspection of scrap according to the requirements in 40 CFR 63.7700(c) no later than one year after the effective date of 40 CFR 63, Subpart EEEEE.

D.1.3 Carbon Monoxide Limitation [326 IAC 9-1-2] [CP-0970012-04]

Pursuant to CP-0970012-04, issued on November 29, 1997, and 326 IAC 9-1-2, the emission of carbon monoxide from the grey iron cupola, identified as emission unit 1N, shall be controlled by a direct flame afterburner. The melt rate shall not exceed 69.9 tons per hour. The afterburner, CE-4N, for VOC and CO control shall be in operation and control emissions from the cupola at all times the cupola is in operation. When operating the afterburner shall maintain a minimum average hourly operating temperature of 1372°F. This minimum temperature requirement applies at all times during afterburner operation, except for the following:

- (1) periods when the afterburner is turned off;
- (2) periods of startup; and
- (3) periods of shutdown.

D.1.4 VOC Limitation [326 IAC 2-2][CP 0970012-04][326 IAC 9-1-2][326 IAC 8-1-6]

Pursuant to CP 0970012-04 and 326 IAC 8-1-6 (BACT), issued on November 20, 1997, in order that the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) do not apply to the Cupola Melt System, metal production shall not exceed 400,000 tons per consecutive twelve (12) month period with compliance determined at the end of each month, from Cupola Melt System, comprised of emission units identified as 1N, 2N, and 3N. VOC emissions shall not exceed 0.012 pounds of VOC per ton of metal produced. This is equivalent to 2.44 tons of VOC per twelve (12) consecutive month period.

D.1.5 PM-10 Limitations [326 IAC 2-2][CP 0970012-04]

- (a) Pursuant to CP 0970012-04, issued on November 20, 1997, in order that the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) do not apply to the Cupola Melt System (Emissions Units 1N, 2N, and 3N), the emission of particulate matter (PM) and particulate matter less than 10 microns in size (PM10) shall be limited as follows (Table 1):

Table 1

Emission Unit ID	Description	PM/PM10	
		lb/ton	ton/year
1N	Cupola	0.112	22.4
2N	Electric Induction Holding Furnace	0.100	19.9
3N	Coke and Limestone Material	0.108	21.6
		<u>Total:</u>	<u>63.9</u>

D.1.6 Sulfur Dioxide Limitation [326 IAC 2-2]

In order that the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) do not apply to the Cupola Melt System (Emissions Units 1N, 2N, and 3N), the emission of sulfur dioxide (SO₂) shall be limited as follows (Table 2):

Table 2

Emission Unit ID	Description	SO ₂	
		lb/ton	ton/year
1N	Cupola	0.333	66.6
2N	Electric Induction Holding Furnace	0	0
3N	Coke and Limestone Material	0	0
		<u>Total:</u>	<u>66.6</u>

D.1.7 Particulate Matter Limitations [326 IAC 6-1-2]

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

- (a) The cupola, identified as 1N, shall be limited to particulate matter emissions of no greater than thirty-four hundredths (0.34) g/dscm (fifteen hundredths (0.15) grain/dscf).
- (b) The electric induction holding furnace, identified as Unit 2N, shall be limited to particulate matter emissions of no greater than sixteen-hundredths (0.16) g/dscm (seven-hundredths (0.07) grain/dscf).
- (c) The coke and limestone material handling shall be limited to particulate matter emissions of no greater than seven-hundredths (0.07) g/dscm (three-hundredths (0.03) grain/dscf).

D.1.8 Lead Limitation [326 IAC 2-2]

In order that the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) do not apply to the Cupola Melt System (Emissions Units 1N, 2N, and 3N), the emission of lead (Pb) shall be limited as follows (Table 3):

Table 3

Emission Unit ID	Description	Pb	
		lb/ton	ton/year
1N	Cupola	0.00462	0.924
2N	Electric Induction Holding Furnace	0.00109	0.218
3N	Coke and Limestone Material	0.00014	0.028
		<u>Total:</u>	<u>1.17</u>

D.1.9 Carbon Monoxide (CO) Limitation [326 IAC 2-2]

In order that the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) do not apply to the Cupola Melt System (Emissions Units 1N, 2N, and 3N), the emission of Carbon Monoxide (CO) shall be limited as follows (Table 4):

Table 4

Emission Unit ID	Description	CO	
		lb/ton	ton/year
1N	Cupola	1.333	266.6

2N	Electric Induction Holding Furnace	0	0
3N	Coke and Limestone Material	0	0
		<u>Total:</u>	<u>266.6</u>

D.1.10 Nitrous Oxides (NO_x) Limitation [326 IAC 2-2]

In order that the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) do not apply to the Cupola Melt System (Emissions Units 1N, 2N, and 3N), the emission of nitrous oxides (NO_x) shall be limited as follows (Table 5):

Table 5

Emission Unit ID	Description	NO _x	
		lb/ton	ton/year
1N	Cupola	0.16	32.0
2N	Electric Induction Holding Furnace	0	0
3N	Coke and Limestone Material	0	0
		<u>Total:</u>	<u>32.0</u>

D.1.11 Beryllium Limitation [326 IAC 2-2]

In order that the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) do not apply to the Cupola Melt System (Emissions Units 1N, 2N, and 3N), the emission of beryllium shall be limited as follows (Table 6):

Table 6

Emission Unit ID	Description	Beryllium	
		lb/ton	ton/year
1N	Cupola	0.000002	0.00039
2N	Electric Induction Holding Furnace	0	0
3N	Coke and Limestone Material	0	0
		<u>Total:</u>	<u>0.00039</u>

D.1.12 Cupola Melt System [CP 0970012-04]

Pursuant to Construction Permit 0970012-04, the Units 1N and 2N shall not exceed a rate of 69.9 tons of metal per hour. The permittee shall record the average throughput once per twenty-four hour period and the hours of operation for that twenty-four hour period.

D.1.13 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

Compliance Determination Requirements

D.1.14 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Within 180 days after issuance of this Part 70 permit, in order to demonstrate compliance with Condition D.1.1, D.1.2, D.1.3, D.1.4, D.1.5, D.1.6, and D.1.7, the Permittee shall perform VOC, PM, PM-10, SO₂, Pb, Beryllium, and CO testing on Emission unit 1N and PM, PM-10, VOC, and Pb testing on Emission unit 2N, and PM, PM-10, and VOC testing on Emission unit 3N utilizing

methods as approved by the Commissioner. These tests shall be repeated at least once every two and one-half (2 ½) years from the date of this valid compliance demonstration. PM-10 includes filterable and condensible PM-10. Testing shall be conducted in accordance with Section C- Performance Testing.

D.1.15 Particulate Matter (PM)

Pursuant to 326 IAC 6-1-2 and CP-0970012-04, issued on November 20, 1997, and in order to comply with D.1.5 and D.1.7,

- (a) the baghouses, 2720E and 2720W, for PM control shall be in operation and control emissions from the cupola, 1N, at all times that the cupola is in operation; and
- (b) the baghouse, CE-1530, for PM control shall be in operation and control emissions from the electric induction holding furnaces, 2N, at all times that the electric induction holding furnaces are in operation.

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

D.1.16 Visible Emissions Notations

- (a) Visible emission notations of the cupola melt system (Units 1N, 2N, and 3N) stack exhausts shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

D.1.17 Parametric Monitoring for the Baghouses

The Permittee shall record the total static pressure drop across the baghouses used in conjunction with the Unit 1N, 2N, and 3N, at least once per shift when the respective process is in operation and venting to the atmosphere. When for any one reading, the pressure drop across any baghouse for 1N or 2N is outside the normal range of 2 to 12 inches of water or the baghouse for 3N is outside the normal range of 2 to 6 inches of water, or a range established during the latest stack test the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. 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 - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

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

D.1.18 Baghouse and Cartridge Filter Inspections

An inspection shall be performed each calendar quarter of all bags and cartridges controlling Units 1N, 2N, and 3N when venting to the atmosphere. All defective bags and cartridges shall be replaced. Inspections required by this condition shall not be performed in consecutive months.

D.1.19 Broken or Failed Bag Detection

In the event that bag failure has been observed:

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. The eight (8) hour requirement does not apply if operations have been discontinued. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit. If operations continue after bag failure is observed and it will be 10 days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.
- (b) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

D.1.20 Parametric Monitoring for the Afterburner

- (a) A continuous monitoring system shall be calibrated, maintained, and operated on the cupola for measuring temperature of the cupola gas stream. For the purposes of this condition, continuous shall mean no less than once per minute. The output of this system shall be recorded as an hourly average. From the date of issuance of this permit until the approved stack test results are available, the Permittee shall take appropriate response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports whenever the hourly average temperature of the cupola gas stream is below 1372 °F. Once the approved stack test results are available, the Permittee shall take appropriate response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports whenever the hourly average temperature of the cupola gas stream is below the average hourly temperature determined during the most recent compliant stack test, as approved by IDEM. This minimum temperature requirement applies at all times during cupola operation, except for the following:
 - (1) periods when the cupola blast air is turned off;
 - (2) periods when the blast air has been turned on for less than 30 consecutive minutes; and
 - (3) during the last 30 minutes of operation of the cupola.

An hourly average temperature that is below 1372 °F is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports shall be considered a deviation from this permit.

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

- (b) The Permittee shall determine the hourly average temperature from the most recent valid stack test that demonstrates compliance with limits in condition D.1.4 and D.1.9, as approved by IDEM.
- (c) On and after the date the approved stack test results are available, the Permittee shall take appropriate response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports whenever the hourly average temperature of the cupola gas stream is below the hourly average temperature as observed during the compliant stack test. An hourly average temperature that is below the hourly average temperature as observed during the compliance stack test is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports 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.1.21 National Emissions Standards for Hazardous Air Pollutants for Iron and Steel Foundries - Notification Requirements [40 CFR 63, Subpart EEEEE]

- (a) Pursuant to 40 CFR 63.7750, the Permittee shall submit all of the notifications required by 40 CFR 63.6(h)(4) and (5), 63.7(b) and (c); 63.8(e); 63.8(f)(4) and (6); 63.9(b) through (h) that apply to the affected source and chosen compliance method by the specified dates. These notifications include, but are not limited to, the following:
 - (1) An Initial Notification containing the information specified in 40 CFR 63.9(b)(2) no later than 120 days after the effective date of 40 CFR 63, Subpart EEEEE.
 - (2) A Notification of Compliance Status containing the information required by 40 CFR 63.9(h) in accordance with 40 CFR 63.7750(e). The Notification of Compliance Status must be submitted:
 - (A) Before the close of business on the 30th calendar day following completion of the initial compliance demonstration for each initial compliance demonstration that does not include a performance test; and
 - (B) Before the close of business on the 60th calendar day following the completion of the performance test according to the requirement specified in 40 CFR 63.10(d)(2) for each initial compliance demonstration that does include a performance test.
 - (3) If required to conduct a performance test, a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin as required by 40 CFR 63.7(b)(1) and 40 CFR 63.7750(d).
 - (4) If required to use a continuous monitoring system (CMS), notifications, if required, as specified in 40 CFR 63.9(g), by the date of submission of the notification of intent to conduct a performance test.
 - (5) If required to conduct opacity or visible emissions observations, the anticipated date for conducting the opacity or visible emission observations specified in 40 CFR 63.6(h)(5) in accordance with the appropriate schedule specified in 40 CFR 63.9(f) as required by 40 CFR 63.7750(a).
- (b) The notifications required by paragraph (a) shall be submitted to:

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

Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Director, Air and Radiation Division
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

and

Office of Environmental Services
Air Quality Management Section
2700 South Belmont Avenue
Indianapolis, Indiana 46221

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

D.1.22 Requirement to Submit a Significant Permit Modification Application [326 IAC 2-7-12][326 IAC 2-7-5]

The Permittee shall submit an application for a significant permit modification to IDEM, OAQ to include information regarding which compliance option or options will be chosen in the Part 70 permit.

- (a) The significant permit modification application shall be consistent with 326 IAC 2-7-12, including information sufficient for IDEM, OAQ to incorporate into the Part 70 permit the applicable requirements of 40 CFR 63, Subpart EEEEE, a description of the affected source and activities subject to the standard, and a description of how the Permittee will meet the applicable requirements of the standard.
- (b) The significant permit modification application shall be submitted no later than twenty-seven months after the effective date of 40 CFR 63, Subpart EEEEE.
- (c) The significant permit modification application shall be submitted to:

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

and

Office of Environmental Services
Air Quality Management Section
2700 South Belmont Avenue
Indianapolis, Indiana 46221

D.1.23 Record Keeping Requirements

- (a) To document compliance with Condition D.1.12, the Permittee shall maintain records of the average throughput once per twenty-four hour period and the hours of operation for each twenty-four hour period for Units 1N and 2N.
- (b) To document compliance with Condition D.1.16, the Permittee shall maintain records of visible emission notations of Units 1N, 2N, and 3N stack exhausts once per shift.

- (c) To document compliance with Condition D.1.17 the Permittee shall maintain records once per shift of the total static pressure drop during normal operation when venting to the atmosphere.
- (d) To document compliance with Condition D.1.18, the Permittee shall maintain records of the results of the inspections required under Condition D.1.18 and the dates the vents are redirected.
- (e) To document compliance with D.1.20, the Permittee shall maintain records of the temperature of the cupola gas stream and the times when the cupola blast air is turned on and off.
- (f) In order to document compliance with Conditions D.1.5, D.1.6, D.1.8, D.1.9, and D.1.10 the Permittee shall maintain records of the amount of metal production from the cupola.
- (g) To document compliance with Condition D.1.13, the Permittee shall maintain of records of any additional inspections prescribed by the Preventive Maintenance Plan.
- (h) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.25 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.4 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.2 FACILITY OPERATION CONDITIONS

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

One (1) Impact Mold Line, consisting of:

- (a) One (1) pouring/cooling line, consisting of two (2) pouring furnaces, and a mold cooling line, identified as Units 5a and 5b, installed in 1988, with a combined maximum capacity of 75 tons of melted metal per hour and an effective maximum capacity of 69.9 tons of melted metal per hour based on the most recent stack test for the cupola, using a fabric filter Baghouse, identified as CE-1502, as PM control, and exhausting to stack S-1502. (The emissions from the sand homogenizer and basement sand transfer shakers of the Green Sand System are also controlled by Unit CE-1502.)
- (b) One (1) Sand Handling System, consisting of sand handling conveyors/belts, mixers, bucket elevator, cooling drum and impact mold station, identified as Unit 4, installed in 1988, with a maximum capacity of 450 tons of sand per hour, using two (2) venturi type wet collectors, identified as CE-1501E and CE-1501W, for PM control, exhausting to stacks S-1501E and S-1501W.
- (c) One (1) Punch-up/Push-off process, identified as Unit 26, installed in 1988, with a maximum capacity of 75 tons of melted metal per hour and an effective maximum capacity of 69.9 tons of melted metal per hour based on the most recent stack test for the cupola, using a fabric filter Baghouse, identified as CE-1504, as PM control, and exhausting to stack S-1504.
- (d) One (1) Oscillating Shakeout Conveyor, identified as Unit 28, installed in 1988, with a maximum capacity of 75 tons of melted metal per hour and an effective maximum capacity of 69.9 tons of melted metal per hour based on the most recent stack test for the cupola, using two (2) fabric baghouses, CE-1503N, M, S, and CE 1595, as PM control, and exhausting to stacks S-1503, S-1504, and S-1595, respectively.-1595.

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

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

D.2.1 VOC Emissions [326 IAC 2-2-3] [326 IAC 2-7-6(3)] [326 IAC 2-7-15]

The IDEM has information that indicates that the emissions units included in the Impact Mold Line (Unit 5a, Unit 5b, Unit 4, Unit 26, and Unit 28) are subject to the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration). Therefore, the Permit Shield provided by Condition B.13 of this permit does not apply to these emission units with regards to 326 IAC 2-2 (PSD). The OAQ will promptly reopen this permit using the provisions of 326 IAC 2-7-9 (Permit Reopening) to include detailed requirements necessary to comply with 326 IAC 2-2 (PSD) and a schedule for achieving compliance with such requirements.

D.2.2 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]

- (a) The provisions of 40 CFR 63 Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the iron foundry except when otherwise specified in 40 CFR 63 Subpart EEEEE. The Permittee must comply with these requirements on and after the effective date of 40 CFR 63 Subpart EEEEE.
- (b) Since the applicable requirements associated with the compliance options are not included and specifically identified in this permit, the permit shield authorized by the B section of this permit in the condition titled Permit Shield, and set out in 326 IAC 2-7-15 does not apply to paragraph (a) of this condition.

D.2.3 National Emissions Standards for Hazardous Air Pollutants for Iron and Steel Foundries [40 CFR

Part 63, Subpart EEEEE]

- (a) The affected source, the iron foundry, is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Iron and Steel Foundries, (40 CFR 63, Subpart EEEEE), effective the date the rule is published in the Federal Register. Pursuant to this rule, the Permittee must comply with 40 CFR 63, Subpart EEEEE on and after the date that is three years after the effective date of the rule, except as provided in paragraph (d), or accept and meet an enforceable HAP emissions limit below the major source threshold prior to three years after the effective date of the rule. Since the applicable requirements associated with the compliance options are not included and specifically identified in this permit, the permit shield authorized by the B section of this permit in the condition titled Permit Shield, and set out in 326 IAC 2-7-15 does not apply to paragraph (a) of this condition.
- (b) The following emissions unit comprises the affected source that is subject to 40 CFR 63, Subpart EEEEE:
- One (1) pouring/cooling line.
- (c) The definitions of 40 CFR 63, Subpart EEEEE at 40 CFR 63.7765 are applicable to the affected source.
- (d) Pursuant to 40 CFR 63.7700(a) and 40 CFR 63.7683(b), the Permittee shall comply with the certification requirements in 40 CFR 63.7700(b) or prepare and implement a plan for the selection and inspection of scrap according to the requirements in 40 CFR 63.7700(c) no later than one year after the effective date of 40 CFR 63, Subpart EEEEE.

D.2.4 Particulate Matter (PM) [326 IAC 2-2] [326 IAC 6-1-2][Permit 870012-3]

In order that the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) do not apply to the IML:

- (a) The pouring/cooling line, exhausting to stack S-5a, shall emit after control not more than 0.015 gr/dscf and 7.7 pounds per hour of PM and PM10.
- (b) The Punch-up/Push-off process, exhausting to stacks S-5b and S-4, shall emit after control not more than 0.015 gr/dscf and 26.4 pounds per hour of PM and PM10.
- (c) The Oscillating Shakeout Conveyor, exhausting to stacks S-28a, S-28b, and S-5b, shall emit after control not more than 0.015 gr/dscf and 19.1 pounds per hour of PM and PM10.
- (d) The Sand Handling System, exhausting to stacks S-4 and S-5b, shall emit after control not more than 0.015 gr/dscf and 26.4 pounds per hour of PM and PM10.

These requirements satisfy the requirements of 326 IAC 6-1-2 and Permit 870012-3.

D.2.5 Opacity [Permit 870012-3]

Pursuant to Permit 870012-3, issued in 1987, the visible emissions from the pouring/cooling line, sand handling and punch-up/push-off process, Units 5a, 5b, 4 and 26, shall not exceed an opacity of ten percent (10%) where opacity is determined as an average of twenty-four (24) consecutive observations recorded at fifteen (15) second intervals.

D.2.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

Compliance Determination Requirements

D.2.7 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

- (a) Within 36 months after issuance of this Part 70 permit, in order to demonstrate compliance with Conditions D.2.3 and D.2.4, the Permittee shall perform PM and PM-10 testing on the sand handling system, identified as Emission unit 4, 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. PM-10 includes filterable and condensable PM-10. Testing shall be conducted in accordance with Section C- Performance Testing.
- (b) Within 180 days after permit issuance, in order to demonstrate compliance with Conditions D.2.1, the Permittee shall perform VOC testing on the Impact Mold Line 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.2.8 Particulate Matter (PM)

- (a) The baghouse, CE-1504, for PM control shall be in operation and control emissions from the Sand Screening/Bleed off, Unit 404, at all time the Sand Screening/Bleed off is in operation.
- (b) In order to comply with D.2.4, at all times the pouring/cooling line is in operation, the baghouse CE-1502 shall be in operation and controlling emissions from the pouring/cooling line.
- (c) In order to comply with D.2.4, at all times the Oscillating Shakeout Conveyor is in operation, the baghouses CE1503 N, M, S, and CE1595 shall be in operation and controlling emissions from the Oscillating Shakeout Conveyor.
- (d) In order to comply with D.2.4, at all times the Sand Handling System is in operation, the baghouses CE1501E and CE1501W shall be in operation and controlling emissions from the Sand Handling System.

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

D.2.9 Visible Emissions Notations

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

D.2.10 Parametric Monitoring for Baghouses and Wet Scrubbers

The Permittee shall record the total static pressure drop across the baghouses and wet

scrubbers used in conjunction with the Impact Mold Lines, at least once per shift when the IML is in operation when venting to the atmosphere. When for any one reading, the pressure drop across CE-1502, CE-1504, CE-1503N, CE-1503M, or CE-1503S is outside the normal range of 2 to 8 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C-Compliance Response Plan - Preparation, Implementation, Records, and Reports. When for any one reading, the pressure drop across CE-1595 is outside the normal range of 1 to 10 or a range established during the latest stack test the Permittee shall take reasonable response steps in accordance with Section C-Compliance Response Plan - Preparation, Implementation, Records, and Reports. When for any one reading, the pressure drop across for the wet scrubbers, CE-1501E and CE-1501W, is outside the normal range of 8 to 12 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C-Compliance Response Plan - Preparation, Implementation, Records, and Reports. 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 - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

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

D.2.11 Baghouse Inspections

An inspection shall be performed each calendar quarter of all bags controlling the IML operation when venting to the atmosphere. All defective bags shall be replaced. Inspections required by this condition shall not be performed in consecutive months.

D.2.12 Scrubber Inspections

An inspection shall be performed each calendar quarter the scrubbers controlling the IML sand handling operation when venting to the atmosphere. Inspections required by this condition shall not be performed in consecutive months.

D.2.13 Broken or Failed Bag Detection

In the event that bag failure has been observed:

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. The eight (8) hour response requirement does not apply if operations have been discontinued. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit. If operations continue after bag failure is observed and it will be 10 days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.
- (b) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

D.2.14 Scrubber Failure Detection

In the event that scrubber failure has been observed:

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

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

D.2.15 National Emissions Standards for Hazardous Air Pollutants for Iron and Steel Foundries - Notification Requirements [40 CFR 63, Subpart EEEEE]

- (a) Pursuant to 40 CFR 63.7750, the Permittee shall submit all of the notifications required by 40 CFR 63.6(h)(4) and (5), 63.7(b) and (c); 63.8(e); 63.8(f)(4) and (6); 63.9(b) through (h) that apply to the affected source and chosen compliance method by the specified dates. These notifications include, but are not limited to, the following:
- (1) An Initial Notification containing the information specified in 40 CFR 63.9(b)(2) no later than 120 days after the effective date of 40 CFR 63, Subpart EEEEE.
 - (2) A Notification of Compliance Status containing the information required by 40 CFR 63.9(h) in accordance with 40 CFR 63.7750(e). The Notification of Compliance Status must be submitted:
 - (A) Before the close of business on the 30th calendar day following completion of the initial compliance demonstration for each initial compliance demonstration that does not include a performance test; and
 - (B) Before the close of business on the 60th calendar day following the completion of the performance test according to the requirement specified in 40 CFR 63.10(d)(2) for each initial compliance demonstration that does include a performance test.
 - (3) If required to conduct a performance test, a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin as required by 40 CFR 63.7(b)(1) and 40 CFR 63.7750(d).
 - (4) If required to use a continuous monitoring system (CMS), notifications, if required, as specified in 40 CFR 63.9(g), by the date of submission of the notification of intent to conduct a performance test.
 - (5) If required to conduct opacity or visible emissions observations, the anticipated date for conducting the opacity or visible emission observations specified in 40 CFR 63.6(h)(5) in accordance with the appropriate schedule specified in 40 CFR 63.9(f) as required by 40 CFR 63.7750(a).
- (b) The notifications required by paragraph (a) shall be submitted to:

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

and

United States Environmental Protection Agency, Region V
Director, Air and Radiation Division
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

and

Office of Environmental Services
Air Quality Management Section
2700 South Belmont Avenue
Indianapolis, Indiana 46221

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

D.2.16 Requirement to Submit a Significant Permit Modification Application [326 IAC 2-7-12][326 IAC 2-7-5]

The Permittee shall submit an application for a significant permit modification to IDEM, OAQ to include information regarding which compliance option or options will be chosen in the Part 70 permit.

- (a) The significant permit modification application shall be consistent with 326 IAC 2-7-12, including information sufficient for IDEM, OAQ to incorporate into the Part 70 permit the applicable requirements of 40 CFR 63, Subpart EEEEE, a description of the affected source and activities subject to the standard, and a description of how the Permittee will meet the applicable requirements of the standard.
- (b) The significant permit modification application shall be submitted no later than twenty-seven months after the effective date of 40 CFR 63, Subpart EEEEE.
- (c) The significant permit modification application shall be submitted to:

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

and

Office of Environmental Services
Air Quality Management Section
2700 South Belmont Avenue
Indianapolis, Indiana 46221

D.2.17 Record Keeping Requirements

- (a) To document compliance with Condition D.2.9, the Permittee shall maintain records of visible emission notations of the IML stack exhausts once per shift.
- (b) To document compliance with Condition D.2.10, the Permittee shall maintain records once per shift of the total static pressure drop during normal operation when venting to the atmosphere.
- (c) To document compliance with Conditions D.2.11 and D.2.12, the Permittee shall maintain records of the results of the inspections required under Conditions D.2.11 and D.2.12.
- (d) To document compliance with Condition D.2.6, the Permittee shall maintain of records of any additional inspections prescribed by the Preventive Maintenance Plan.

- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.3 FACILITY OPERATION CONDITIONS

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

One (1) Block Shaking Process, consisting of three (3) shakers, identified as Unit 44, installed in 2001, each with a maximum capacity of 15.2 tons of castings per hour, using one (1) fabric filter Baghouse and one (1) cartridge filter Baghouse, identified as CE-1596 and CE-1520S, as PM control, and exhausting to stacks S-1596 and S-1520S.

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

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

D.3.1 Particulate Matter (PM) Limitations [326 IAC 6-1-2(a)]

Pursuant to 326 IAC 6-1-2(a), the PM emissions for the each of the three (3) shakers, Unit 44, shall be less than 0.03 grain per dry standard cubic foot (gr/dscf).

D.3.2 Particulate Matter Limitations [326 IAC 2-2][CP 097-12464-00012]

Pursuant to CP 097-12464-00012, issued on March 14, 2001, and in order that the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) do not apply to the three (3) shaker units, metal production shall not exceed 400,000 tons per consecutive twelve (12) month period with compliance determined at the end of each month, from the three (3) shaker units, identified as Unit 44. PM and PM10 emissions shall not exceed 0.075 pounds per ton of metal produced. This is equivalent to less than fifteen (15) tons of PM or PM10 per twelve (12) consecutive month period.

D.3.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the shakers and its control devices.

Compliance Determination Requirements

D.3.4 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Within 36 months after issuance of this Part 70 Permit, in order to demonstrate compliance with Condition D.3.1 and D.3.2, the Permittee shall perform PM and PM-10 testing on each of the shakers 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. PM-10 includes filterable and condensable PM-10. Testing shall be conducted in accordance with Section C- Performance Testing.

D.3.5 Particulate Matter (PM)

Pursuant to 326 IAC 6-1-2, and in order to comply with D.3.1 and D.3.2, the baghouses, CE-1596 and CE-1520S, for PM control shall be in operation and control emissions from the shakers, Unit 44, at all times that the shakers are in operation.

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

D.3.6 Visible Emissions Notations

- (a) Visible emission notations of the shakers, Unit 44, stack exhausts shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

D.3.7 Parametric Monitoring for the Baghouses

The Permittee shall record the total static pressure drop across the baghouses used in conjunction with the shakers, Unit 44, at least once per shift when the respective process is in operation and venting to the atmosphere. When for any one reading, the pressure drop across a baghouse is outside the normal range of 1 to 10 inches of water or a range established during the latest stack test the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. 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 - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

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

D.3.8 Baghouse and Cartridge Inspections

An inspection shall be performed each calendar quarter of all baghouses and cartridges controlling the shakers when venting to the atmosphere. All defective bags shall be replaced. Inspections required by this condition shall not be performed in consecutive months.

D.3.9 Broken or Failed Bag or Cartridge Filter Detection

In the event that bag or cartridge filter failure has been observed:

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. The eight (8) hour response requirement does not apply if operations have been discontinued. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit. If operations continue after bag failure is observed and it will be 10 days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.
- (b) For single compartment baghouses or cartridge filters, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the

event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

D.3.10 Record Keeping Requirements

- (a) To document compliance with Condition D.3.6, the Permittee shall maintain records of once per shift visible emission notations of the shakers stack exhausts.
- (b) To document compliance with Condition D.3.7, the Permittee shall maintain records of the total static pressure drop across the baghouses used in conjunction with the shakers, Unit 44.
- (c) To document compliance with Condition D.3.8, the Permittee shall maintain records of the results of the inspections required under Condition D.3.8.
- (d) To document compliance with Condition D.3.2, the Permittee shall maintain the following:
 - (1) Calendar dates covered in the compliance determination period.
 - (2) Actual amount (in tons) of metal processed in Unit 44. This may be determined based upon the amount of metal poured from the cupola.
- (e) To document compliance with Condition D.3.3, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.
- (f) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.3.11 Reporting Requirements

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

SECTION D.4 FACILITY OPERATION CONDITIONS

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

One (1) Cleaning Department, consisting of:

- (1) One (1) Finishing Line A/System #1, identified as Unit 32, with a maximum capacity of 37.5 tons of castings per hour, using two (2) fabric filter baghouses, identified as CE-1591 and CE-1592, as PM control, and exhausting to stacks S-1591 and S-1592, installed in 1999.
- (2) One (1) Finishing Line B/System #2, identified as Unit 33, with a maximum capacity of 37.5 tons of castings per hour, using two (2) fabric filter baghouses, identified as CE-1593 and CE-1594, as PM control, and exhausting to stacks S-5Nb and S-6Nb, installed in 1999.
- (3) One (1) Sprue Removal Process, identified as Unit 6, installed in 1988, with a maximum capacity of 1.1 tons of shakeout sand with a maximum capacity of 75 tons of melted metal per hour and an effective maximum capacity of 69.9 tons of melted metal per hour based on the most recent stack test for the cupola, using one (1) cartridge filter baghouse, identified as CE-1513, as PM as control, and exhausting to stack S-1513.

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

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

D.4.1 Particulate Matter (PM) [326 IAC 2-2][326 IAC 6-1-2][CP 0980012-01][CP 880012-5]

- (a) Pursuant to 326 IAC 6-1-2 and CP 0980012-01, issued on February 24, 1998, particulate matter emissions from the finishing line A/System #1, Unit 32, and finishing line B/System 2, Unit 33 shall each be limited to particulate matter emissions of no greater than seven-hundredths (0.07) g/DCM (three-hundredths (0.03) grain /dscf).
- (b) Pursuant to 326 IAC 6-1-2, and CP 880012-5, issued on January 11, 1988, and in order that the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) do not apply, the sprue removal process, Unit 6, shall each be limited to particulate matter emissions of no greater than seven-hundredths (0.07) g/DCM (three-hundredths (0.03) grain/dscf). Pursuant to CP 880012-5, the total exhaust flow rate for the sprue removal process is 34,000 cubic feet per minute (acfm). This is equivalent to 38.3 tons of PM and PM 10 per twelve (12) consecutive month period.

D.4.2 Particulate Matter (PM) [326 IAC 2-2][CP 0980012-01]

Pursuant to CP 0980012-01, issued on February 24, 1998, and in order that the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) do not apply to the Finishing Lines (Units 32, 33), metal production from Units 32 and 33 combined shall not exceed four hundred thousand (400,000) tons of metal per twelve month consecutive period with compliance determined at the end of each month, and PM and PM10 emissions shall not exceed 0.433 pounds per ton of metal produced from each baghouse. This is equivalent to eighty-five (85) tons of PM and PM 10 per twelve (12) consecutive month period.

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

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

Compliance Determination Requirements

D.4.4 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

In order to demonstrate compliance with Condition D.4.2, the Permittee shall perform PM and PM 10 testing on the Cleaning Department within 180 days after issuance of this Part 70 permit 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. PM-10 includes filterable and condensable PM-10. Testing shall be conducted in accordance with Section C- Performance Testing.

D.4.5 Particulate Matter (PM)

Pursuant to 326 IAC 6-1-2, and in order to comply with D.4.1 and D.4.2, the baghouses, CE-1591, CE-1592, CE-1593, CE-1594, and CE-1513, for PM control shall be in operation and control emissions from the Units 32, 33 and 6 at all times that the units are in operation.

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

D.4.6 Visible Emissions Notations

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

D.4.7 Parametric Monitoring for Baghouses

The Permittee shall record the total static pressure drop across the baghouses used in conjunction with the Cleaning Department, at least once per shift when the Cleaning Department is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 2 to 10 inches of water (for all except CE-1513 which is 2 to 8) or a range established during the latest stack test the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. 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 - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

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

D.4.8 Baghouse and Cartridge Inspections

An inspection shall be performed each calendar quarter of all bags and cartridges controlling the Cleaning Department operation when venting to the atmosphere. All defective bags shall be replaced. Inspections required by this condition shall not be performed in consecutive months.

D.4.9 Broken or Failed Bag Detection

In the event that bag failure has been observed:

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. The eight (8) hour response requirement does not apply if operations have been discontinued. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit. If operations continue after bag failure is observed and it will be 10 days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.
- (b) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

D.4.10 Record Keeping Requirements

- (a) To document compliance with Condition D.4.6, the Permittee shall maintain records of the once per shift visible emission notations of the Cleaning Department stack exhausts.
- (b) To document compliance with Condition D.4.7, the Permittee shall maintain records of differential static pressure during normal operation once per shift when venting to the atmosphere
- (c) To document compliance with Conditions D.4.8, the Permittee shall maintain records of the results of the inspections required under Condition D.4.8 and the dates the vents are redirected.
- (d) To document compliance with Condition D.4.2, the Permittee shall maintain the following:
 - (1) Calendar dates covered in the compliance determination period.
 - (3) Actual amount (in tons) of metal processed in the Cleaning Department.
- (e) To document compliance with Condition D.4.3, the Permittee shall maintain of records of any additional inspections prescribed by the Preventive Maintenance Plan.
- (f) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.4.11 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.4.2 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.5 FACILITY CONDITIONS

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

One (1) Core Room, consisting of:

- (a) Four (4) sand storage silos/hoppers, identified as Units 41 through 44, with capacities of 150 tons per hour each, described as follows:
 - (1) Unit 41, installed in 1998, with 800 tons of sand storage capacity serving the Core Room West core making line/Line A-System #1, using one (1) filter cartridge Baghouse, CE-1586, as PM control, and exhausting to stack S-1586.
 - (2) Unit 42, installed in 1998, with 400 tons of sand storage capacity serving the Core Room West core making line/Line A-System #1, using one (1) filter cartridge Baghouse, CE-1582, as PM control, and exhausting to stack S-1582.
 - (3) Unit 43, installed in 1998, with 800 tons of sand storage capacity serving the Core Room East core making line/Line B-System #2, using one (1) filter cartridge Baghouse, CE-1583, as PM control, and exhausting to stack S-1583.
 - (4) Unit 44, installed in 1998, with 400 tons of sand storage capacity serving the Core Room East core making line/Line B-System #2, using one (1) filter cartridge Baghouse, CE-1584, as PM control, and exhausting to stack S-1584.
- (b) One (1) sand transfer operation, identified as Unit 45, installed in 1998, with capacities of 150 tons per hour, using one (1) cartridge filter Baghouse, identified as CE-1586, as PM control, and exhausting to stack S-1586.
- (c) One (1) rail sand unloading operation, identified as Unit 46, installed in 1998, with capacities of 150 tons per hour, using one (1) cartridge filter Baghouse, identified as CE-1585, as PM control, and exhausting to stack S-1585.
- (d) Core Room West/Line A/System #1 core making line, identified as Unit 48A, comprised of fourteen (14) coldbox machines, Unit 47 A, and fourteen (14) cold box mixers with each combination of coldbox core making machine and coldbox sand mixer having a capacity of 5.06 tons of cores per hour and a maximum tea usage of 7.13 pounds per hour and maximum resin usage of 7.59 pounds per hour, and Unit 49A, OV1-8339 crank case oven rated at 13.5 MM Btu/hr, and unit 50A, OV2-8322 water jacket and valley core dry oven rated at 12 MM Btu/hr (neither of which are considered to be steam generating units under 40 CFR Subpart D, Da, Db, or Dc), with a combined System 1 & 2 sand core production rate of 298, 840 tons of cores per 12 consecutive month period which is equivalent to 34 tons of cores per hour, using:
 - (1) an acid scrubber, identified as CE-8180W, installed in 1998, as TEA (triethylamine) control, and exhausting to stack S-8180W.
 - (2) sand transfer belt within System #1, installed in 1998, having a combined capacity of 36 tons of sand per hour, using two (2) cartridge filter baghouses, CE-1581 and CE-1582, as PM control, exhausting to stacks S-1581 and S-1582.
- (e) Core Room East/Line B/System #2 core making line, identified as Unit 48B, comprised of fifteen (15) coldbox machines, Unit 47 B, and fifteen (15) cold box mixers, each combination of coldbox core making machine and coldbox sand mixer with a maximum capacity of 5.06 tons of cores per hour and a maximum tea usage of 7.13 pounds per hour and maximum resin usage of 7.59 pounds per hour, and Unit 49B, OV1-8440 crank case oven rated at 13.5 MM Btu/hr, and unit 50B, OV2-8322 water jacket and valley core dry oven rated at 12 MM Btu/hr (neither of which are considered to be steam generating units under 40 CFR Subpart D, Da, Db, or Dc), with a combined System 1 & 2 sand core production rate of 298, 840 tons of cores per 12 consecutive month period which is equivalent to 34 tons of cores per hour, using:
 - (1) an acid scrubber, identified as CE-8280E, installed in 1998, as TEA (triethylamine) control, and exhausting to stack S-8280E.
 - (2) sand transfer belt within System #1, installed in 1998, having a combined capacity of 36 tons of sand per hour, using two (2) cartridge filter baghouses, CE-1583 and

Facility Description [326 IAC 2-7-5(15)] (cont'd):

CE-1584, as PM control, exhausting to stacks S-1583 and S-1584.

- (f) Two (2) natural gas fired boilers, identified as Units 1East and 2West, installed in 1998, each with a maximum capacity of ten (10) million Btu per hour (MMBtu/hr), exhausting to stacks S-1 East and S-2 West, respectively.

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

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

D.5.1 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]

- (a) The provisions of 40 CFR 63 Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the iron foundry except when otherwise specified in 40 CFR 63 Subpart EEEEE. The Permittee must comply with these requirements on and after the effective date of 40 CFR 63 Subpart EEEEE.
- (b) Since the applicable requirements associated with the compliance options are not included and specifically identified in this permit, the permit shield authorized by the B section of this permit in the condition titled Permit Shield, and set out in 326 IAC 2-7-15 does not apply to paragraph (a) of this condition.

D.5.2 National Emissions Standards for Hazardous Air Pollutants for Iron and Steel Foundries [40 CFR Part 63, Subpart EEEEE]

- (a) The affected source, the iron foundry, is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Iron and Steel Foundries, (40 CFR 63, Subpart EEEEE), effective the date the rule is published in the Federal Register. Pursuant to this rule, the Permittee must comply with 40 CFR 63, Subpart EEEEE on and after the date that is three years after the effective date of the rule, except as provided in paragraph (d), or accept and meet an enforceable HAP emissions limit below the major source threshold prior to three years after the effective date of the rule. Since the applicable requirements associated with the compliance options are not included and specifically identified in this permit, the permit shield authorized by the B section of this permit in the condition titled Permit Shield, and set out in 326 IAC 2-7-15 does not apply to paragraph (a) of this condition.
- (b) The following emissions units comprise the affected source that is subject to 40 CFR 63, Subpart EEEEE:
- (1) Core Room West core making line/Line A/System #1, identified as Unit 48A; and
 - (2) Core Room East core making line/Line B/System #2, identified as Unit 48B.
- (c) The definitions of 40 CFR 63, Subpart EEEEE at 40 CFR 63.7765 are applicable to the affected source.
- (d) Pursuant to 40 CFR 63.7700(a) and 40 CFR 63.7683(b), the Permittee shall comply with the certification requirements in 40 CFR 63.7700(b) or prepare and implement a plan for the selection and inspection of scrap according to the requirements in 40 CFR 63.7700(c) no later than one year after the effective date of 40 CFR 63, Subpart EEEEE.

D.5.3 TEA Limitation [326 IAC 8-1-6] [CP-970012-03]

Pursuant to 326 IAC 8-1-6 and CP-970012-03, issued on April 25, 1997, all core making machines shall be operated under total enclosure and overall control efficiency of the acid scrubbers shall be no less than 95% for TEA.

D.5.4 VOC Limitation [326 IAC 2-2] [CP-970012-03]

Pursuant to CP-970012-03, issued on April 25, 1997, and in order that the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) do not apply to the Core Room (Unit 41, 42, 43, 44, 45, 46, 47A, 47B, 48A, 48B, 50, 51), the source shall process not more than two hundred ninety-eight thousand eight hundred forty (298,840) tons of cores per consecutive twelve (12) month period. VOC emissions shall not exceed 2.1 pounds of VOC per ton of cores. Compliance shall be determined at the end of each month.

D.5.5 Particulate Matter (PM) [326 IAC 6-1-2]

Pursuant to 326 IAC 6-1-2, particulate matter emissions from the Core Room, Units 41, 42, 43, 44, 45, 46, 47A, 47B, 48A, 48B, 50A, 50B, 1East, and 2West shall each be limited to particulate matter emissions of no greater than seven-hundredths (0.07) g/DCM (three-hundredths (0.03) grain/dscf.

D.5.6 Particulate Emissions Limitations for Sources of Indirect Heating [326 IAC 6-2-4]

Particulate emissions from indirect heating facilities shall be limited by the following equation:

$$Pt = 1.09/Q^{0.16} = 1.09/20^{0.16} = 0.67$$

where Pt = Pounds of particulate matter emitted per million Btu (lb/MMBtu) heat input.

Q = Total source maximum operating capacity rating in million Btu per hour (MMBtu/hr) heat input.

Therefore, particulate emissions from the natural gas fired boilers, identified as 1East and 2West shall not exceed 0.67 pounds per million Btu (lbs/MMBtu).

D.5.7 Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units [326 IAC 12, 40 CFR 60, Subpart Dc]

Pursuant to the New Source Performance Standard, 326 IAC 12, 40 CFR 60, Subpart Dc:

- (a) Daily natural gas consumption for each of the natural gas fired boilers, identified as 1East and 2West, with maximum capacities of 10 million Btu per hour (MMBtu/hr) shall be recorded as per 40 CFR Part 60 Subpart Dc. Records shall be retained for a period of at least five (5) years from the date of the generation of the measurement or record.
- (b) Pursuant to 40 CFR 60 §60.48c(a), the owner or operator of this source shall submit notification of the date of construction or reconstruction, anticipated startup, and actual startup, as provided by §60.7 of this rule.

D.5.8 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

Compliance Determination Requirements

D.5.9 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Between January 2005 and June 2005, in order to demonstrate compliance with Conditions D.5.3 and D.5.4, the Permittee shall perform VOC and TEA testing on both Core Room scrubbers utilizing methods as approved by the Commissioner. This test shall be repeated at least once every two and one half (2 ½) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.

D.5.10 Particulate Matter (PM)

Pursuant to 326 IAC 6-1-2, and in order to comply with D.5.5, the baghouses, CE-1586, CE-1582, CE-1583, CE-1584, and CE-1585, for PM control shall be in operation and control emissions from the sand storage silos hoppers, identified as Units 41 through 44, the sand

transfer operations, identified as Unit 45, the rail sand unloading operations, identified as Unit 46, and the sand transfer belt at all times that these units are in operation.

D.5.11 VOC and TEA

Pursuant to 326 IAC 8-1-6, and in order to comply with D.5.3 and D.5.4, the acid scrubbers, CE-8180W and CE-8280E for TEA control shall be in operation and control emissions from the Core Room West and the Core Room East, respectively, at all times that these units are in operation. A continuous flow meter and pH meter shall be calibrated, maintained, and operated for the TEA scrubbers.

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

D.5.12 Visible Emissions Notations

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

D.5.13 Parametric Monitoring for Baghouses

The Permittee shall record the total static pressure drop across the baghouses used in conjunction with the Core Room, at least once per shift when the Core Room is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouses is outside the normal range of 2 to 6 inches of water the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. 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 - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

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

D.5.14 Baghouse Inspections

An inspection shall be performed each calendar quarter of all bags controlling the Core Room operation when venting to the atmosphere. All defective bags shall be replaced. Inspections required by this condition shall not be performed in consecutive months.

D.5.15 Scrubber Inspections

An inspection shall be performed each calendar quarter the scrubbers controlling Core Room West and the Core Room East when venting to the atmosphere. Inspections required by this condition shall not be performed in consecutive months.

D.5.16 Broken or Failed Bag Detection

In the event that bag failure has been observed:

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. The eight (8) hour response requirement does not apply if operations have been discontinued. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit. If operations continue after bag failure is observed and it will be 10 days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.
- (b) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

D.5.17 Scrubber Failure Detection

In the event that scrubber failure has been observed:

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

D.5.18 Parametric Monitoring for Acid Scrubbers

The Permittee shall record the total static pressure drop across the scrubbers, the pH, and the flow rate used in conjunction with the Core Room West and the Core Room East, at least once per shift when the Core Rooms are in operation when venting to the atmosphere. When for any one reading, the pressure drop across the scrubbers is outside the normal range of 2 to 6 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. When for any one reading, the pH is greater than 5 or a maximum established in the most recent compliant stack test, or the flow rate is less than 125 gallons per minute or a minimum established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

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

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

D.5.19 National Emissions Standards for Hazardous Air Pollutants for Iron and Steel Foundries - Notification Requirements [40 CFR 63, Subpart EEEEE]

- (a) Pursuant to 40 CFR 63.7750, the Permittee shall submit all of the notifications required by 40 CFR 63.6(h)(4) and (5), 63.7(b) and (c); 63.8(e); 63.8(f)(4) and (6); 63.9(b) through (h) that apply to the affected source and chosen compliance method by the specified dates. These notifications include, but are not limited to, the following:
- (1) An Initial Notification containing the information specified in 40 CFR 63.9(b)(2) no later than 120 days after the effective date of 40 CFR 63, Subpart EEEEE.
 - (2) A Notification of Compliance Status containing the information required by 40 CFR 63.9(h) in accordance with 40 CFR 63.7750(e). The Notification of Compliance Status must be submitted:
 - (A) Before the close of business on the 30th calendar day following completion of the initial compliance demonstration for each initial compliance demonstration that does not include a performance test; and
 - (B) Before the close of business on the 60th calendar day following the completion of the performance test according to the requirement specified in 40 CFR 63.10(d)(2) for each initial compliance demonstration that does include a performance test.
 - (3) If required to conduct a performance test, a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin as required by 40 CFR 63.7(b)(1) and 40 CFR 63.7750(d).
 - (4) If required to use a continuous monitoring system (CMS), notifications, if required, as specified in 40 CFR 63.9(g), by the date of submission of the notification of intent to conduct a performance test.
 - (5) If required to conduct opacity or visible emissions observations, the anticipated date for conducting the opacity or visible emission observations specified in 40 CFR 63.6(h)(5) in accordance with the appropriate schedule specified in 40 CFR 63.9(f) as required by 40 CFR 63.7750(a).
- (b) The notifications required by paragraph (a) shall be submitted to:

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

and

United States Environmental Protection Agency, Region V
Director, Air and Radiation Division
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

and

Office of Environmental Services
Air Quality Management Section
2700 South Belmont Avenue
Indianapolis, Indiana 46221

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

D.5.20 Requirement to Submit a Significant Permit Modification Application [326 IAC 2-7-12][326 IAC 2-7-5]

The Permittee shall submit an application for a significant permit modification to IDEM, OAQ to include information regarding which compliance option or options will be chosen in the Part 70 permit.

- (a) The significant permit modification application shall be consistent with 326 IAC 2-7-12, including information sufficient for IDEM, OAQ to incorporate into the Part 70 permit the applicable requirements of 40 CFR 63, Subpart EEEEE, a description of the affected source and activities subject to the standard, and a description of how the Permittee will meet the applicable requirements of the standard.
- (b) The significant permit modification application shall be submitted no later than twenty-seven months after the effective date of 40 CFR 63, Subpart EEEEE.
- (c) The significant permit modification application shall be submitted to:

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

and

Office of Environmental Services
Air Quality Management Section
2700 South Belmont Avenue
Indianapolis, Indiana 46221

D.5.21 Record Keeping Requirements

- (a) To document compliance with Condition D.5.7, the Permittee shall maintain records in accordance with (1) through (3) below.
 - (1) Calendar dates covered in the compliance determination period;
 - (2) Actual fuel oil usage since last compliance determination period;
 - (3) To certify compliance when burning natural gas only, the Permittee shall maintain records of fuel used.
- (b) To document compliance with Condition D.5.12, the Permittee shall maintain records of visible emission notations once per shift of the Core Room stack exhausts.

- (c) To document compliance with Condition D.5.13, the Permittee shall maintain records of the differential static pressure during normal operation once per shift when venting to the atmosphere
- (d) To document compliance with Conditions D.5.14 and D.5.15, the Permittee shall maintain records of the results of the inspections required under Conditions D.5.14 and D.5.15 and the dates the vents are redirected.
- (e) To document compliance with Condition D.5.18, the Permittee shall maintain records of the pH, the flow rate, and the differential static pressure during normal operation once per shift when venting to the atmosphere.
- (f) To document compliance with Condition D.5.9, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.
- (g) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.5.22 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.5.4 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.6 FACILITY OPERATION CONDITIONS

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

One (1) Refuse Bunker Area, identified as Unit 34, installed in 1995, with a capacity of 450 tons of waste sand per hour, using fabric filter baghouse, identified as CE-1522 as PM control, and exhausting to stack S-1522, installed in 1995.

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

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

D.6.1 Particulate Matter (PM) [326 IAC 6-1-2]

Pursuant to 326 IAC 6-1-2, particulate matter emissions from Refuse Bunker Area, Unit 34, shall be limited to particulate matter emissions of no greater than seven-hundredths (0.07) g/dcm (three-hundredths (0.03) grain/dscf).

D.6.2 Particulate Matter less than 10 Micron (PM10) [326 IAC 2-2][326 IAC 6-1-2][CP 960012-02]

Pursuant to CP 960012-02 issued on February 29, 1996, and in order that the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) do not apply to the Refuse Bunker Area, Unit 34, the baghouse grain loading shall be 0.0044 gr/dscf and 3.39 pounds per hour (lb/hr) which is equivalent to PM and PM-10 emissions of less than 15 tons per consecutive twelve month period. Compliance with this limit satisfies the requirements of 326 IAC 6-1-2.

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

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

Compliance Determination Requirements

D.6.4 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Within 180 days after permit issuance, in order to demonstrate compliance with Conditions D.6.1 and D.6.2, the Permittee shall perform PM/PM 10 testing on the Refuse Bunker Area baghouse 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. PM-10 includes filterable and condensable PM-10. Testing shall be conducted in accordance with Section C- Performance Testing.

D.6.5 Particulate Matter (PM)

The baghouse, CE-1522, for PM control shall be in operation and control emissions from the Refuse Bunker Area, identified as Unit 34, at all times the Refuse Bunker Area is in operation.

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

D.6.6 Visible Emissions Notations

- (a) Visible emission notations of the Refuse Bunker Area stack exhaust shall be performed during normal daylight operations once per shift when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

D.6.7 Parametric Monitoring for Baghouses

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the Refuse Bunker, at least once per shift when the baghouse is in operation and venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 2 to 10 inches of water the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. 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 - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

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

D.6.8 Baghouse Inspections

An inspection shall be performed each calendar quarter of the baghouse controlling the Refuse Bunker Area operation when venting to the atmosphere. Inspections required by this condition shall not be performed in consecutive months. All defective bags shall be replaced.

D.6.9 Broken or Failed Bag Detection

In the event that bag failure has been observed:

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. The eight (8) hour response requirement does not apply if operations have been discontinued. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit. If operations continue after bag failure is observed and it will be 10 days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.
- (b) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

D.6.10 Record Keeping Requirements

- (a) To document compliance with Condition D.6.6, the Permittee shall maintain records of once per shift visible emission notations of the refuse bunker stack exhaust.
- (b) To document compliance with Condition D.6.7, the Permittee shall maintain records of the differential static pressure during normal operation once per shift when venting to the atmosphere.
- (c) To document compliance with Condition D.6.8, the Permittee shall maintain records of the results of the inspections required.
- (d) To document compliance with Condition D.6.3, the Permittee shall maintain of records of any additional inspections prescribed by the Preventive Maintenance Plan.
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.7 FACILITY OPERATION CONDITIONS

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

Conveyors as follows:

- (a) Covered conveyor for coal or coke conveying of less than or equal to 360 tons per day; (326 IAC 6-1-2)
- (b) Covered conveyors for limestone conveying of less than or equal to 7,200 tons per day for sources other than mineral processing plants constructed after August 31, 1983. (326 IAC 6-1-2):

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; and woodworking operations. (326 IAC 6-1-2)

Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. [326 IAC 8-3-2] [326 IAC 8-3-5]

One (1) tray dump operation, identified as 44a, with a maximum capacity of twenty (20) tons of sand per hour, using a sliding tray design, baffles to minimize the height of the drop, and shrouding of the tray to control fugitive particulate matter, with PM emissions controlled by two (2) baghouses (for the shaker units), identified as CE-7 and CE-8, exhausting to stacks S-7 and S-8.) (326 IAC 6-1-2)

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

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

D.7.1 Particulate Matter Limitations [326 IAC 6-1-2]

Pursuant to 326 IAC 6-1-2, particulate matter emissions from the conveyors, grinding and machining operations, and the tray dump operation shall be limited to particulate matter emissions of no greater than seven-hundredths (0.07) g/DCM (three-hundredths (0.03) grain/dscf).

D.7.2 Volatile Organic Compounds (VOC)[326 IAC 8-3-2]

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

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

D.7.3 Volatile Organic Compounds (VOC)[326 IAC 8-3-5]

-
- (a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), for cold cleaner degreaser operations without remote solvent reservoirs constructed after July 1, 1990, the Permittee shall ensure that the following control equipment requirements are met:
- (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
 - (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F));
 - (B) The solvent is agitated; or
 - (C) The solvent is heated.
 - (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.
 - (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
 - (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
 - (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (B) A water cover when solvent is used is insoluble in, and heavier than, water.
 - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility construction of which commenced after July 1, 1990, shall ensure that the following operating requirements are met:
- (1) Close the cover whenever articles are not being handled in the degreaser.
 - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
 - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

Compliance Determination Requirements

D.7.4 Particulate Matter (PM)

In order to comply with D.7.1, the baghouses, identified as CE-7 and CE-8, for PM control shall be in operation and control emissions from the tray dump operations, identified as Unit 44a, at all times that Unit 44a is in operation.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
and
INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES
AIR QUALITY MANAGEMENT SECTION
DATA COMPLIANCE
PART 70 OPERATING PERMIT
CERTIFICATION**

Source Name: Daimler Chrysler Corporation - Indianapolis Foundry
Source Address: 1100 South Tibbs Avenue, Indianapolis, Indiana 46241
Mailing Address: 1100 South Tibbs Avenue, Indianapolis, Indiana 46241
Part 70 Permit No.: T097-6485-00012

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
P.O. Box 6015
100 North Senate Avenue
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967
and
INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES
AIR QUALITY MANAGEMENT SECTION
DATA COMPLIANCE
2700 South Belmont Ave.
Indianapolis Indiana 46221
Phone: 317-327-2234
Fax: 317-327-2274**

**PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT**

Source Name: Daimler Chrysler Corporation - Indianapolis Foundry
Source Address: 1100 South Tibbs Avenue, Indianapolis, Indiana 46241
Mailing Address: 1100 South Tibbs Avenue, Indianapolis, Indiana 46241
Part 70 Permit No.: T097-6485-00012

This form consists of 2 pages

Page 1 of 2

- ☛ This is an emergency as defined in 326 IAC 2-7-1(12)
 - C The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
 - C The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-5967), 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 Describe:
Type of Pollutants Emitted: TSP, PM-10, SO ₂ , VOC, NO _x , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

A certification is not required for this report.

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

Source Name: Daimler Chrysler Corporation - Indianapolis Foundry
Source Address: 1100 South Tibbs Avenue, Indianapolis, Indiana 46241
Mailing Address: 1100 South Tibbs Avenue, Indianapolis, Indiana 46241
Part 70 Permit No.: T097-6485-00012
Facility: Units 1N, 2N, 3N, 44, 32, 33, and 4
Parameter: Metal processed in the cupola
Limit: 400,000 tons of metal processed per 12 consecutive month period

YEAR: _____

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

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

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

Attach a signed certification to complete this report.

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

Source Name: Daimler Chrysler Corporation - Indianapolis Foundry
 Source Address: 1100 South Tibbs Avenue, Indianapolis, Indiana 46241
 Mailing Address: 1100 South Tibbs Avenue, Indianapolis, Indiana 46241
 Part 70 Permit No.: T097-6485-00012
 Facility: Core Room (Units 41, 42, 43, 44, 45, 46, 47A, 47B, 48A, 48B, 50A, 50B, 1East, and 2West)
 Parameter: Core Production
 Limit: 298,840 tons of cores per 12 consecutive month period

YEAR: _____

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

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

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

Attach a signed certification to complete this report.

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

Source Name: Daimler Chrysler Corporation - Indianapolis Foundry
 Source Address: 1100 South Tibbs Avenue, Indianapolis, Indiana 46241
 Mailing Address: 1100 South Tibbs Avenue, Indianapolis, Indiana 46241
 Part 70 Permit No.: T097-6485-00012

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. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".</p>	
<p><input type="radio"/> NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.</p>	
<p><input type="radio"/> THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD</p>	
<p>Permit Requirement (specify permit condition #)</p>	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
<p>Permit Requirement (specify permit condition #)</p>	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Form Completed By: _____

Title/Position: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

Attachment A

The following state rule have been adopted by reference by the Indianapolis Air Pollutant Control Board and are enforceable by Indianapolis Office of Environmental Services (OES) using local enforcement procedures.

- (1) 326 IAC 1-1-1 through 1-1-3 and 1-1-5;
- (2) 326 IAC 1-2-1 through 1-2-91 (In addition, the IAPCB has adopted several local definitions);
- (3) 326 IAC 1-3-1 through 1-3-4;
- (4) 326 IAC 1-4-1 (The IAPCB added to the adoption by reference a citation to 61 FR 58482 (November 15, 1996));
- (5) 326 IAC 1-5-1 through 1-5-5;
- (6) 326 IAC 1-6-1 through 1-6-6;
- (7) 326 IAC 1-7-1 through 1-7-5;
- (8) 326 IAC 2-3-1 through 2-3-5;
- (9) 326 IAC 2-4-1 through 2-4-6;
- (10) 326 IAC 2-6-1 through 2-6-4;
- (11) 326 IAC 2-7-1 through 2-7-18, 2-7-20 through 2-7-25;
- (12) 326 IAC 2-8-1 through 2-8-15, 2-8-17 through 2-8-10;
- (13) 326 IAC 2-9-1 through 2-9-14;
- (14) 326 IAC 2-10-1 through 2-10-5 (The IAPCB adoption adds the language "state or local" immediately after the word "federal" in 326 IAC 2-10-1);
- (15) 326 IAC 2-11-1, 2-11-3 and 2-11-4 (The IAPCB adoption adds the language "federal, state or local" immediately after the word "by" in 326 IAC 2-11-1);
- (16) 326 IAC 3-1.1-1 through 3-1.1-5;
- (17) 326 IAC 3-2.1-1 through 3-2.1-5;
- (18) 326 IAC 3-3-1 through 3-3-5;
- (19) 326 IAC 4-2-1 through 4-2-2;
- (20) 326 IAC 5-1-1 (a), (b) and c) (5), 5-1-2 (1), (2)(A), (2)c) (4), 5-1-3 through 5-1-5, 5-1-7;
- (21) 326 IAC 7-1.1-1 and 7-1.1-2;
- (22) 326 IAC 7-2-1;
- (23) 326 IAC 7-3-1 and 7-3-2;
- (24) 326 IAC 7-4-2(28) through (31) (Instead of adopting by reference 7-4-2(1) through (27), the IAPCB regulation substitutes the same requirements listed in a format in which the companies are alphabetized and emission points known to no longer exist have been deleted);
- (25) 326 IAC 8-1-0.5 except (b), 8-1-1 through 8-1-2, 8-1-3 except c), (g) and (i), 8-1-5 through 8-1-12;
- (26) 326 IAC 8-2-1 through 8-2-12 (The IAPCB adoption by reference of 8-2- 5 adds additional language specific to Zimmer Paper Products, Incorporated as subpart c);
- (27) 326 IAC 8-3-1 through 8-3-7;
- (28) 326 IAC 8-4-1 through 8-4-5, 8-4-6 (a)(6), (a)(8) and (a)(14) and 8-4-6(b)(1), (b)(3) and 8-4-6c) (In place of 8-4-6(b)(2), which was not adopted, the IAPCB adopted language requiring a pressure relief valve set to release at no less than four and eight-tenths (4.8) Kilo Pascals (seven-tenths (0.7) pounds per square inch)), 8-4-7 except (e), 8-4-8 and 8-4-9;
- (29) 326 IAC 8-5-1 through 8-5-4, 8-5-5 except (a)(3) and (d)(3);
- (30) 326 IAC 8-6-1 and 8-6-2;
- (31) 326 IAC 9-1-1 and 9-1-2;
- (32) 326 IAC 11-1-1 through 11-1-2;
- (33) 326 IAC 11-2-1 through 11-2-3;
- (34) 326 IAC 11-3-1 through 11-3-6;
- (35) 326 IAC 14-1-1 through 14-1-4;

Attachment A continued

- (36) 326 IAC 14-2-1 except 40 CFR 61.145;
- (37) 326 IAC 14-3-1;
- (38) 326 IAC 14-4-1;
- (39) 326 IAC 14-5-1;
- (40) 326 IAC 14-6-1;
- (41) 326 IAC 14-7-1;
- (42) 326 IAC 14-8-1 through 14-8-5;
- (43) 326 IAC 15-1-1, 15-1-2(a)(1), (a)(2) and (a)(8), 15-1-3 and 15-1-4;
- (44) 326 IAC 20-1-1 through 20-1-4 (In 20-1-3(b)(2) the adoption states that "permitting authority" means the commissioner of IDEM or the administrator of OES, whichever is applicable);
- (45) 326 IAC 20-2-1;
- (46) 326 IAC 20-3-1;
- (47) 326 IAC 20-4-1;
- (48) 326 IAC 20-5-1;
- (49) 326 IAC 20-6-1;
- (50) 326 IAC 20-7-1;
- (51) 326 IAC 20-8-1;
- (52) 326 IAC 20-9-1;
- (53) 326 IAC 20-14-1;
- (54) 326 IAC 20-15-1;
- (55) 326 IAC 20-16-1;
- (56) 326 IAC 20-17-1;
- (57) 326 IAC 20-18-1;
- (58) 326 IAC 20-19-1;
- (59) 326 IAC 20-20-1;
- (60) 326 IAC 20-21-1;
- (61) 326 IAC 21-1-1 (The adoption states that "or the administrator of OES" is added in (b));
- (62) 326 IAC 22-1-1 (The adoption states that "or the administrator of OES" is added in (b)).

Attachment B: Fugitive Dust Plan
Company Name: Daimler Chrysler Corporation - Indianapolis Foundry
Plant Location: 1100 South Tibbs Avenue, Indianapolis, Indiana 46241
Permit Number: T097-6485-00012
Permit Reviewer: Angelique Oliger

**Indiana Department of Environmental Management
Office of Air Quality
and
Indianapolis Environmental Resources Management Division**

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

Source Background and Description

Source Name: Daimler Chrysler Corporation - Indianapolis Foundry
Source Location: 1100 South Tibbs Avenue, Indianapolis, Indiana 46241
County: Marion
SIC Code: 3321
Operation Permit No.: T097-6485-00012
Permit Reviewer: Angelique Oliger

The Office of Air Quality (OAQ) and the Indianapolis Office of Environmental Services (OES) have reviewed a Part 70 permit application from Daimler Chrysler Corporation relating to the operation of a grey iron foundry, including core making, metal melting, sand molding, cleaning and finishing of final cast pieces to produce engine block castings. This Part 70 permit contains provisions intended to satisfy the requirements of the construction permit rules.

Source Definition

Daimler Chrysler Corporation - Indianapolis Foundry (DCC) had been determined to consist of two (2) plants based on the following determination. **DCC notified OES on 4/25/03 that the contract with IRI had been severed, therefore, IRI is no longer part of the DCC operations.**

Source Determination: One source is the grey iron foundry, including core making, metal melting, sand molding, cleaning and finishing of final cast pieces to produce engine block castings and the other is International Recycling, Inc. (IRI) which recycles core sand:

- (a) DCC is located at 1100 South Tibbs Avenue, Indianapolis, Indiana 46241; and
- (b) IRI is located at 1100 South Tibbs Avenue, Indianapolis, Indiana 46241.

DCC has an SIC code of 3321, and IRI has an SIC code of 3543 (foundry core sand handling). The two (2) plants are not owned by the same company. To determine whether collocated sources may be viewed as a single source for the purposes of a Part 70 permit, they must be evaluated under the criteria of common control, SIC code or a support relationship, and be on contiguous or adjacent properties. IDEM and OES determined that IRI and DCC were one source because of the following:

Common Control:

There is common control. IRI-Tibbs has a fluidized bed furnace for recycling the foundry sand. The furnace has a maximum capacity of 19,710 tons per year. Under the contract between DCC and IRI, DCC sends IRI 11,000 tons of foundry sand per year and IRI must recycle it and send all 11,000 tons back to DCC. In 1999, DCC only used 1,000 tons of the recycled sand in the foundry on a "trial basis only." As we set out in our guidance, Air-005-NPD, day to day control of an auxiliary activity can be evidenced by a majority of the auxiliary's output going to the primary. IRI-Tibbs has to use more than 50% of its capacity to recycle DCC's foundry sand. Separately, there is the "but/for" test, focusing on whether the auxiliary activity would exist absent the needs of the primary activity. As DCC states in its 1999 letter, the primary purpose of building the IRI-Tibbs plant was to develop a process to enable DCC to recycle and reuse its spent foundry sand.

Same SIC Code or Support Activity:

DCC asserts that IRI-Tibbs should have a different two digit SIC Code. That argument isn't the deciding factor. IRI-Tibbs provides more than 50% of its output to DCC, therefore, there is a support relationship.

Contiguous or adjacent properties:

It is the same property.

Therefore, these two sources, which are located on contiguous properties, have a support relationship, and share common control would have been considered one (1) source, except that DCC has severed the contract with IRI-Tibbs.

Permitted Emission Units and Pollution Control Equipment

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

- (a) A cupola melt system consisting of:
 - (1) One (1) cupola, identified as Unit 1N, installed in 1999, with a maximum capacity of 75 tons of melted metal per hour and an effective maximum capacity of 69.9 tons of melted metal per hour based on the most recent stack test for the cupola, using a natural gas fired 18 MMBtu/hr afterburner, identified as CE-2701, for CO and VOC control, and fabric filter baghouses, identified as CE-2720E and CE-2720W, for PM control, and exhausting to stack S-2720.
 - (2) One (1) electric induction holding furnace, identified as Unit 2N, installed in 1999, with a maximum capacity of 75 tons of melted metal per hour and an effective maximum capacity of 69.9 tons of melted metal per hour based on the most recent stack test for the cupola, using a cartridge filter Baghouses, identified as CE-1530, for PM control, and exhausting to stack S-1530.
 - (3) One (1) coke/limestone area (for introduction into the cupola), identified as Unit 3N, installed in 1996, with maximum capacities of 10.9 tons of coke per hour and 2 tons of limestone per hour, using two (2) baghouses, identified as CE-1527M and CE-1527 M&S, for PM control, and exhausting to stack S-1527. (CE-1527N was installed based on an Agreed Judgement 49F1294120V4977, dated January 29, 1996.)
- (b) One (1) Impact Mold Line, consisting of:
 - (1) One (1) pouring/cooling line, consisting of two (2) pouring furnaces, and a mold cooling line, identified as Units 5a and 5b, installed in 1988, with a combined maximum capacity of 75 tons of melted metal per hour and an effective maximum capacity of 69.9 tons of melted metal per hour based on the most recent stack test for the cupola, using a fabric filter Baghouse, identified as CE-1502, as PM control, and exhausting to stack S-1502. (The emissions from the sand homogenizer and basement sand transfer shakers of the Green Sand System are also controlled by Unit CE-1502.)
 - (2) One (1) Sand Handling System, consisting of sand handling conveyors/belts, mixers, bucket elevator, cooling drum and impact mold station, identified as Unit 4, installed in 1988, with a maximum capacity of 450 tons of sand per hour, using two (2) venturi type wet collectors, identified as CE-1501E and CE-1501W, exhausting to stacks S-1501E and S-1501W.
 - (3) One (1) Punch-up/Push-off process, identified as Unit 26, installed in 1989, with a maximum capacity of 75 tons of melted metal per hour and an effective maximum capacity of 69.9 tons of melted metal per hour based on the most recent stack test for the cupola, using a fabric filter Baghouse, identified as CE-1504, as PM control, and exhausting to stack S-1504. (CE-1504 was installed based on an Agreed Judgement 49F1294120V4977, dated January 29, 1996.)

- (4) One (1) Oscillating Shakeout Conveyor, identified as Unit 28, installed in 1989, with a maximum capacity of 75 tons of melted metal per hour and an effective maximum capacity of 69.9 tons of melted metal per hour based on the most recent stack test for the cupola, using two (2) fabric baghouses, CE-1503N, M, S, and CE 1595, as PM control, and exhausting to stacks S-1503, S-1504, and S-1595, respectively.
- (c) One (1) Block Shaking Process, consisting of three (3) shakers, identified as Unit 44, installed in 2001, each with a maximum capacity of 25 tons of castings per hour, using one (1) fabric filter Baghouse and one (1) cartridge filter Baghouse, identified as CE-1596 and CE-1520S, as PM control, and exhausting to stacks S-1596 and S-1520S.
- (d) One (1) Cleaning Department, consisting of:
 - (1) One (1) Finishing Line A/System #1, identified as Unit 32, installed in 1999, with a maximum capacity of 37.5 tons of castings per hour, using two (2) fabric filter baghouses, identified as CE-1591 and CE-1592, as PM control, and exhausting to stacks S-1591 and S-1592.
 - (2) One (1) Finishing Line B/System #2, identified as Unit 33, installed in 1999, with a maximum capacity of 37.5 tons of castings per hour, using two (2) fabric filter baghouses, identified as CE-1593 and CE-1594, as PM control, and exhausting to stacks S-1593 and S-1594.
 - (3) One (1) Sprue Removal Process, identified as Unit 6, installed in 1998, with a maximum capacity of 1.1 tons of shakeout sand and a maximum capacity of 75 tons of melted metal per hour and an effective maximum capacity of 69.9 tons of melted metal per hour based on the most recent stack test for the cupola, using one (1) cartridge filter Baghouse, identified as CE-1513, as PM as control, and exhausting to stack S-1513.
- (e) One (1) Core Room, consisting of:
 - (1) Four (4) sand storage silos/hoppers, identified as Units 41 through 44, with capacities of 150 tons per hour each, described as follows:
 - (A) Unit 41, installed in 1998, with 800 tons of sand storage capacity serving the Core Room West core making line/Line A-System #1, using one (1) filter cartridge Baghouse, CE-1586, as PM control, and exhausting to stack S-1586.
 - (B) Unit 42, installed in 1998, with 400 tons of sand storage capacity serving the Core Room West core making line/Line A-System #1, using one (1) filter cartridge Baghouse, CE-1582, as PM control, and exhausting to stack S-1582.
 - (C) Unit 43, installed in 1998, with 800 tons of sand storage capacity serving the Core Room East core making line/Line B-System #2, using one (1) filter cartridge Baghouse, CE-1583, as PM control, and exhausting to stack S-1583.
 - (D) Unit 44, installed in 1998, with 400 tons of sand storage capacity serving the Core Room East core making line/Line B-System #2, using one (1) filter cartridge Baghouse, CE-1584, as PM control, and exhausting to stack S-1584.
 - (2) One (1) sand transfer operation, identified as Unit 45, installed in 1998, with capacities of 150 tons per hour, using one (1) cartridge filter Baghouse, identified as CE-1586, as PM control, and exhausting to stack S-1586.

- (3) One (1) rail sand unloading operation, identified as Unit 46, installed in 1998, with capacities of 150 tons per hour, using one (1) cartridge filter Baghouse, identified as CE-1585, as PM control, and exhausting to stack S-1585.
 - (4) Core Room West core making line/Line A/System #1, identified as Unit 48A, installed in 1998, comprised of fourteen (14) coldbox machines, Unit 47 A, fourteen (14) cold box mixers, each combination of coldbox core making machine and coldbox sand mixer with a capacity of 5.06 tons of cores per hour and a maximum tea usage of 7.13 pounds per hour and maximum resin usage of 7.59 pounds per hour, and Unit 49A, OV1-8339 crank case oven rated at 13.5 MM Btu/hr, and unit 50A, OV2-8322 water jacket and valley core dry oven rated at 12 MM Btu/hr, with a combined System 1 & 2 sand core production rate of 298, 840 tons of cores per 12 consecutive month period which is equivalent to 6.9 tons of cores per hour, using:
 - (A) an acid scrubber, identified as CE-8180W, installed in 1998, as TEA (triethylamine) and VOC control, and exhausting to stack S-8180W.
 - (B) sand transfer belt within System #1, installed in 1998, having a combined capacity of 36 tons of sand per hour, using two (2) cartridge filter baghouses, CE-1581 and CE-1582, as PM control, exhausting to stacks S-1581 and S-1582.
 - (5) Core Room East core making line/Line B/System #2, identified as Unit 48B, installed in 1998, comprised of fifteen (15) coldbox machines, Unit 47 B, fifteen (15) cold box mixers, each combination of coldbox core making machine and coldbox sand mixer with a maximum capacity of 5.06 tons of cores per hour and a maximum tea usage of 7.13 pounds per hour and maximum resin usage of 7.59 pounds per hour, and Unit 49B, OV1-8440 crank case oven rated at 13.5 MM Btu/hr, and unit 50B, OV2-8322 water jacket and valley core dry oven rated at 12 MM Btu/hr, with a combined System 1 & 2 sand core production rate of 298, 840 tons of cores per 12 consecutive month period which is equivalent to 6.9 tons of cores per hour, using:
 - (A) an acid scrubber, identified as CE-8280E, installed in 1998, as TEA (triethylamine) and VOC control, and exhausting to stack S-8280E.
 - (B) sand transfer belt within System #1, installed in 1998, having a combined capacity of 36 tons of sand per hour, using two (2) cartridge filter baghouses, CE-1583 and CE-1584, as PM control, exhausting to stacks S-1583 and S-1584.
 - (6) Two (2) natural gas fired boilers, identified collectively as Unit TBD, installed in 1998, with a combined maximum capacity of ten (10) million Btu per hour (MMBtu/hr), exhausting to stack S-TBD.
- (f) One (1) Refuse Bunker Area, identified as Unit 34, installed in 1995, with a capacity of 450 tons of waste sand per hour, using a fabric filter Baghouse, identified as CE-1522 as PM control, and exhausting to stack S-34. CE-1522 was installed under Agreed Judgement 49F1293120V4977, dated January 29, 1996.

Unpermitted Emission Units and Pollution Control Equipment

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

Insignificant Activities

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

- (a) Space heaters, process heaters, or boilers using the following fuels:
 - (1) Internal Combustion natural gas fired sources that include two (2) boilers, serving

- the Core Room, identified as Unit TBD, installed in 1998, with a maximum capacity of seven (7) MM Btu/hr each, exhausting to stack S-TBD. (326 IAC 6-1-2)
- (2) Fuel oil-fired combustion sources with heat input equal to or less than two million (2,000,000) Btu per hour and firing fuel containing less than five-tenths (0.5) percent sulfur by weight.
 - (3) Eight (8) natural gas heaters, installed in 1998, identified as Emission Units 11N-1 through 11 N-8, each with a maximum heat input capacity of 5.208 million Btu per hour.
- (b) Equipment powered by internal combustion engines of capacity equal to or less than 500,000 Btu/hour, except where total capacity of equipment operated by one stationary source exceeds 2,000,000 Btu/hour.
 - (c) Combustion source flame safety purging on startup.
 - (d) 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.
 - (e) A petroleum fuel, other than gasoline, dispensing facility having a storage capacity less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.
 - (f) The following VOC and HAP storage containers:
 - (1) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughput less than 12,000 gallons.
 - (2) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.
 - (g) Refractory storage not requiring air pollution control equipment.
 - (h) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. [326 IAC 8-3-2] [326 IAC 8-3-5]
 - (i) Cleaners and solvents characterized as follows:
 - (1) Having a vapor pressure equal to or less than 2 kPa; 15 mm Hg; or 0.3 psi measured at 38 degrees C (100EF) or;
 - (2) Having a vapor pressure equal to or less than 0.7 kPa; 5mm Hg; or 0.1 psi measured at 20EC (68EF); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.
 - (j) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume.
 - (k) Any operation using aqueous solutions containing less than 1% by weight of VOC, excluding HAPs.
 - (l) Noncontact cooling tower systems with either of the following:
 - (a) Forced and induced draft cooling tower system not regulated under a NESHAP.
 - (m) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.

- (n) Heat exchanger cleaning and repair.
- (o) Paved and unpaved roads and parking lots with public access. (326 IAC 6-4)
- (p) Conveyors as follows:
 - (1) Covered conveyor for coal or coke conveying of less than or equal to 360 tons per day; (326 IAC 6-1-2)
 - (2) Covered conveyors for limestone conveying of less than or equal to 7,200 tons per day for sources other than mineral processing plants constructed after August 31, 1983. (326 IAC 6-1-2)
- (q) Asbestos abatement projects regulated by 326 IAC 14-10.
- (r) 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.
- (s) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.
- (t) Emergency generators as follows:
 - (a) Diesel generators not exceeding 1600 horsepower.
- (u) Other emergency equipment as follows:
 - (a) Stationary fire pumps.
- (v) 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; and woodworking operations. (326 IAC 6-1-2)
- (w) Mold release agents using low volatile products (vapor pressure less than or equal to 2 kilopascals measured at 38 degrees C).
- (x) A laboratory as defined in 326 IAC 2-7-1 (21) (D).
- (y) Other activities or categories not previously identified greater than the insignificant thresholds listed as follows:
 - (1) Core transfer conveyer, transfers finished cores from the core room to the casting line,
 - (2) Crane shed activities (scrap metal), activity covered under the fugitive dust plan,
 - (3) Wastewater treatment plant,
 - (4) One (1) tray dump operation, identified as 44a, with a maximum capacity of twenty (20) tons of sand per hour, using a sliding tray design, baffles to minimize the height of the drop, and shrouding of the tray to control fugitive particulate matter, with PM emissions controlled by two (2) baghouses (for the shaker units), identified as CE-7 and CE-8, exhausting to stacks S-7 and S-8.) (326 IAC 6-1-2) Potential emissions before control are less than insignificant levels.

Existing Approvals

The source has constructed or has been operating under the following previous approvals:

- (a) SSM097-17276i-00012, issued on June 6, 2003, for one (1) coldbox core machine (#15) using an existing acid scrubber as control.
- (b) E097-16879-00012, issued on January 17, 2003, for one (1) tray dump operation.
- (c) CP 097-12464-00012, issued on March 14, 2001, for the construction of three shaker units, identified as emission unit 44, with a combined maximum capacity of 75 tons of castings per hour, using two (2) baghouses, identified as CE8 and CE7, as PM control, and exhausting 60,000 acfm at stack/vent ID S-8, and 12,000 acfm at stack/vent ID S-7, respectively.
- (d) I-097-12464I-00012, interim construction permit, issued on July 13, 2000, for the construction of three shaker units, identified as emission unit id 44, with a combined maximum capacity of 75 tons of castings per hour, using two (2) baghouses, identified as CE8 and CE7, as PM control, and exhausting 60,000 acfm at stack/vent ID S-8, and 12,000 acfm at stack/vent ID S-7, respectively.
- (e) CP-0980012-01, issued on February 24, 1998, for Cleaning Line emission units 32 and 33, with maximum capacity of 37.5 tons per hour each, and eight (8) natural gas heaters, heat input capacity ranging from 2.170 to 5.208 Million Btu per hour, replacing emission units 0012-07,0012-09, 0012-11, 0012-13, 0012-15, 0012-16 and 0012-17.
- (f) CP-0970012-04, issued on November 20, 1997 for one cupola with a maximum melt rate of 75 tons of melted metal per hour, two (2) electric induction holding furnaces with a melt rate of 75 tons of melted metal per hour and coke and limestone material handling system with a maximum capacity of 10.9 tons per hour of coke and 2.0 tons per hour of limestone.
- (g) CP-970012-03, issued on April 25, 1997, for the core room, which included the following equipment; A 4.7L Coldbox Core Room consisting of 2 core wash drying ovens, 14 sand mixers, 2 sand silos, 2 conveyORIZED sand transports, and 14 coldbox core machines; A "A" Coldbox Core Room consisting of 2 core wash drying ovens, 15 sand mixers, 2 sand silos, 2 conveyORIZED sand transports, and 15 coldbox core machines; a sand transfer point and a railcar transfer point and internal combustion sources that include 21 air handlers (33.5 MMBTU/hr total), 4 space heaters (0.25 MMBTU/hr total), 5 door heaters (1.2 MMBTU/hr total), 2 natural gas fired boilers (7 MMBTU/hr each), and 4 portable steam generators (4 MMBTU/hr total). This equipment replaced emission units 0012-12, 0012-18, 0012-19, 0012-20, 0012-21, 0012-22, 0012-23, 0012-24, and 0012-25. Condition 10 of CP-0970012-04 was amended to clarify the equivalence factors of cores produced in the existing coldbox machines to the cores produced by the new coldbox core machines (2.1208), and the equivalence factors of cores produced in the existing hotbox machines to the cores produced by the new hotbox machines (0.5314).
- (h) CP-960012-02 issued on February 29, 1996 for the CKO Bunker, identified as emission unit 34, installed in 1995.
- (i) CP 955354-01, issued on February 3, 1995, for International Recycling Inc. (097-00261) for the recycling of core mold foundry sand. This contract has been terminated and this operation is no longer a part of the Daimler Chrysler Corporation operations
- (j) CP 910012-26, issued on April 8, 1991 for a punch up operation, part of the IML, identified as emission unit 26, installed in 1991.
- (k) CP-910012-02 issued on April 8, 1991, for a shake out, vibratory conveyor and sand/screen bleed off, part of the IML, identified as emission unit 28, installed December 1989.

- (l) Installation Permit 880012-05, issued on January 11, 1988, for a Sprue Removal System, with a maximum process rate of 1.1 ton/hr of shakeout sand and sprues with a total exhaust flow rate of 34,000 acfm (34,000 dscfm), exhausted to a Baghouse.
- (m) 870012-04, issued in 1987, for the pouring/cooling operation, identified as 5a and 5b, of the Impact Mold Line.
- (n) 870012-03, issued in 1987, for the green sand molding operation, identified as 4, of the IML.

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.

The following terms and conditions from previous approvals have been revised in this Part 70 permit:

- (a) Permit Number 880012-5, issued on January 11, 1988,
Description containing the emissions for the sprue removal system. Allowable emissions:
TSP/PM-10 - 0.01 gr/dscf, 2.91 lb/hr, 12.76 ton/yr
Potential to emit:
TSP/PM-10 - 0.01 gr/dscf, 2.91 lb/hr, 12.76 ton/yr

The following condition was incorporated, rather than the allowable emissions limits from Permit Number 88012-5, so that PSD is not applicable:

In order that the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) do not apply to the Cleaning Room (Units 32, 33, 6):

- (1) metal production shall not exceed four hundred thousand (400,000) tons of metal per twelve (12) consecutive month period with compliance determined at the end of each month, and PM and PM10 emissions shall not exceed 0.433 pounds of PM and PM10 per ton of metal produced, and
- (2) emit after control not more than 0.011 gr/dscf of PM 10/PM which is equivalent to 0.433 pounds of PM10/PM per ton of metal processed, which combined with the metal processing limit, is equivalent to eighty-five (85) tons of PM 10 per twelve (12) consecutive month period.

- (b) Permit Number 870012-3, issued on December 29, 1987,
Description containing the emissions for the foundry mold sand processing line (IML).
Allowable emissions:
TSP- 0.015 gr/dscf, 12.5 lb/hr, 38.3 ton/yr

The following condition, rather than the allowable emissions limits from Permit Number 870012-3, was incorporated so that PSD is not applicable:

In order that the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) do not apply to the IML unit 4 shall emit after control not more than 0.015 gr/dscf of PM 10/PM which is equivalent to thirty-eight and three tenths (38.3) tons of PM 10 per twelve (12) month consecutive period.

- (c) Permit Number 870012-4, issued on December 29, 1987,
Description containing the emissions for the pouring and cooling line. Allowable emissions:
TSP/PM-10 - 0.01 gr/dscf, 4.4 lb/hr, 9.0 ton/yr

The following condition, rather than the allowable emissions limits from Permit Number

870012-4, was incorporated so that PSD is not applicable:

In order that the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) do not apply to the IML, the units 5a and 5b shall emit after control not more than 0.01 (7.7 pounds per hour at 60,000 cfm) gr/dscf of PM 10/PM which is equivalent to nine (9.0) tons of PM 10 per twelve (12) month consecutive period.

- (d) The cupola melt system, which was originally permitted by Construction Permit 0970012-04, issued November 20, 1997, at 75 tons of melted metal per hour, has been derated to the rate at which compliance has been demonstrated through stack testing. The stack tests have shown compliance at a capacity of 66.6 tons per hour, the source is required to test at 95 % of the maximum capacity, so the source requests that the maximum capacity be revised to $1.05 * 66.6 = 69.9$ tons of melted metal per hour. Other maximum capacities shall be revised in direct proportion to the amount of metal melted in the cupola:
- (1) one (1) electric induction furnace, identified as Unit 2N, with a maximum capacity of 69.9 tons of metal per hour,
 - (2) Casting lines, identified as Units 5a and 5b, with a maximum capacity of 69.9 tons of metal per hour,
 - (3) sprue removal, identified as Unit 6, with a maximum capacity of 69.9 tons of metal per hour,
 - (4) punch up, identified as Unit 26, with a maximum capacity of 69.9 tons of metal per hour,
 - (5) shakeout operations, identified as Unit 28, with a maximum capacity of 69.9 tons of metal per hour,
 - (6) shakers, identified as Units 44, with a maximum capacity of 69.9 tons of metal per hour.
- (e) The afterburner operating condition 16 from CP-970012-04, issued on November 20, 1997, has been revised. 326 IAC 9-1-2 is applicable to the source, but is a CO limitation, not a VOC limitation. The afterburner does need to be operated to control VOC as well, so that the requirements of 326 IAC 2-2 (PSD) do not apply. Both requirements are separate. Therefore, condition 16 has been changed from:

Condition 16: Afterburner Operating Condition

That pursuant to 326 IAC 9-1-2 the afterburner shall be operated at all times when the Cupola is in operation. The Permittee shall take readings of the incineration temperature at 1750°F or at a level sufficient for 97.4 % VOC control efficiency which can be determined during the initial stack test. The Preventive Maintenance Plan for this afterburner shall contain troubleshooting contingency and corrective actions in accordance with manufacturer's guidelines.

to:

Carbon Monoxide Limitation (326 IAC 9-1-2)

Pursuant to 326 IAC 9-1-2, the emission of carbon monoxide from the grey iron cupola, identified as emission unit 1N, shall be controlled by a direct flame afterburner that maintains a minimum temperature of one thousand three hundred (1,300) degrees Fahrenheit for a minimum retention time of three-tenths (0.3) seconds.

VOC Limitation (326 IAC 2-2)

- (1) In order that the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) do not apply to the Cupola Melt System, the VOC emissions from the grey iron cupola, identified as 1N, shall be limited to 0.47 pounds of VOC per ton of metal produced. The production limitation of the tons of metal in the Cupola Melt System (Emission Units 1N, 2N, 3N) is limited to 400,000 tons per twelve consecutive month period.

- (2) The afterburner shall be operated at all times when the Cupola is in operation. When operating, the afterburner shall maintain a minimum average hourly operating temperature of 1372°F or the average hourly temperature determined during the most recent compliant stack test, as approved by IDEM. This average hourly temperature correlates to an overall VOC control efficiency of at least 97.4% based on stack capture and destruction efficiency test conducted on February 20, 2002. Compliance with this average hourly temperature requirement satisfies the afterburner temperature requirement under 326 IAC 9-1-2.
- (f) The following correction was made:
 The casting lines which include the punch up and shakeout operations were previously described in CP 910012-02, issued in 1991, as being controlled by only a Micropul Baghouses, when based on a April 1997 Agreed Judgement No. 49F1299611OV11272, the punch and shakeout operations have two (2) other Baghouses systems, referred to as the BACT and K & B Collectors, that are also controlling emissions from these processes and whose operations should be required. The baghouses have been added in the descriptions and their operation is being required under this Title V permit.
- (g) Permit CP-970012-03, issued on April 25, 1997, has requirements pertaining to the phase out of the existing core room. However, all of those processes have been removed. The condition has been changed as follows:
 In order that the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) do not apply to the Core Room (Unit 41, 42, 43, 44, 45, 46, 47A, 47B, 48A, 48B, 50, 51), the source shall:
- ~~(7) process not more than two hundred ninety-eight thousand eight hundred forty (298,840) tons of cores per consecutive twelve (12) month period with compliance determined at the end of each month, (which is equivalent to 310.7 tons of VOC per year) and~~
- ~~(8) during the phase out of the existing core room, existing core room production equivalence shall be determined by multiplying the tons of cores produced by a factor of 1.1208. The combined production and emissions from the existing core room shall not exceed the limits specified in this condition.~~
- (h) Permit CP-970012-04, issued on November 20, 1997, for the cupola melt system did not contain conditions limiting the amount of CO, PM, and SO2 from the proposed modification. The following conditions have been added:
 (1) In order that the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) do not apply to the Cupola Melt System (Emissions Units 1N, 2N, and 3N), the emission of Carbon Monoxide (CO) shall be limited as follows (Table 1):

Table 1

Emission Unit ID	Description	CO	
		lb/ton	ton/year
1N	Cupola	1.333	266.6
2N	Electric Induction Holding Furnace	0	0
3N	Coke and Limestone Material	0	0
		<u>Total:</u>	<u>266.6</u>

The tons of metal produced in the Cupola Melt System (Emission Units 1N, 2N, 3N) shall be limited to 400,000 tons per 12 consecutive month period. This production limitation is equivalent to CO emissions of 266.6 tons per twelve (12) consecutive month period.

- (2) In order that the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) do not apply to the Cupola Melt System (Emissions Units 1N, 2N, and 3N), the emission of particulate matter (PM) shall be limited as follows (Table 2):

Table 2

Emission Unit ID	Description	PM	
		lb/ton	ton/year
1N	Cupola	0.7	140
2N	Electric Induction Holding Furnace	0.2	40
3N	Coke and Limestone Material	0.108	21.6
		<u>Total:</u>	<u>201.6</u>

The tons of metal produced in the Cupola Melt System (Emission Units 1N, 2N, 3N) shall be limited to 400,000 tons per 12 consecutive month period. This production limitation is equivalent to PM emissions of 201.6 tons per twelve (12) consecutive month period.

- (3) In order that the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) do not apply to the Cupola Melt System (Emissions Units 1N, 2N, and 3N), the emission of sulfur dioxide (SO2) shall be limited as follows (Table 3):

Table 3

Emission Unit ID	Description	SO2	
		lb/ton	ton/year
1N	Cupola	0.333	66.6
2N	Electric Induction Holding Furnace	0	0
3N	Coke and Limestone Material	0	0
		<u>Total:</u>	<u>66.6</u>

The tons of metal produced in the Cupola Melt System (Emission Units 1N, 2N, 3N) shall be limited to 400,000 tons per 12 consecutive month period. This production limitation is equivalent to sulfur dioxide (SO2) emissions of 66.6 tons per twelve (12) consecutive month period.

The following terms and conditions from previous approvals have been determined no longer applicable; therefore, were not incorporated into this Part 70 permit:

- (a) Permit Number 955354-01, issued on February 3, 1995, for International Recycling, was not incorporated into this permit because this is not considered part of the DCC source at this time.
- (b) Permit Number 880012-5, issued on January 11, 1988, Description containing the emissions for the sprue removal system. Allowable emissions:
 TSP/PM-10 - 0.01 gr/dscf, 2.91 lb/hr, 12.76 ton/yr

Potential to emit:
TSP/PM-10 - 0.01 gr/dscf, 2.91 lb/hr, 12.76 ton/yr

Reason not incorporated: The allowable limits for TSP were based on potential emissions calculations and were incorporated for billing purposes only. The underlying applicable requirement for this pollutant is 326 IAC 6-1-2 and 326 IAC 2-2, which have been included in this Title V permit.

- (c) Permit Number 870012-3, issued on December 29, 1987,
Description containing the emissions for the foundry mold sand processing line (IML).
Allowable emissions:
TSP- 0.015 gr/dscf, 12.5 lb/hr, 38.3 ton/yr

Reason not incorporated: The allowable limits for TSP were based on potential emissions calculations and were incorporated for billing purposes only. The underlying applicable requirement for this pollutant is 326 IAC 6-1-2 which has been included in this Title V permit.

- (d) Permit Number 870012-4, issued on December 29, 1987,
Description containing the emissions for the pouring and cooling line. Allowable
emissions:
TSP/PM-10 - 0.01 gr/dscf, 4.4 lb/hr, 9.0 ton/yr

Reason not incorporated: The allowable limits for TSP were based on potential emissions calculations and were incorporated for billing purposes only. The underlying applicable requirement for this pollutant is 326 IAC 6-1-2 which has been included in this Title V permit.

- (e) The following previously permitted equipment has been removed from the source:
- (1) Permit 870012-1:
 - (A) Two (2) 100 tons electric arc holding furnaces identified as 0012-1,
 - (2) Construction Permit (CP) 0012:
 - (A) Grey iron cupola identified as 0012-01,
 - (B) Holding furnace identified as 0012-01,
 - (C) Wheelabrator shot blaster identified in CP 0012 as 0012-07,
 - (D) Pangborn shot blaster identified in CP 0012 as 0012-07,
 - (E) Pneumatic chisels and grinders identified as 0012-09,
 - (F) Casting and finishing line identified as 0012-10,
 - (G) Casting and finishing line identified as 0012-11,
 - (H) Lake sand receiving identified as 0012-12,
 - (I) Shot blast cleaning cabinet identified as 0012-13,
 - (J) Shot blast shaker hoods identified as 0012-14,
 - (K) CKO grinders and chisels identified as 0012-15,
 - (L) CKO shot blast and shot handling identified as 0012-16,
 - (M) CKO grinders and chisels identified as 0012-17,

- (N) Core and sand holding tanks identified as 0012-18, and
- (O) Media drum casting pre-cleaning identified as 012-01.

- (f) Conditions 4 of both Permit 870012-4 (for pouring and cooling), issued on December 29, 1987, and Permit 870012-3 (for IML), issued on December 29, 1987, contains a limitation of the hours of operation. Additionally, both permits contain both a short term (lb/hr) limit and a long term (ton/yr) limit. The limitation on the hours of operation are unnecessary to assure compliance with either the short term or long term limit but explain assumptions made in the calculations. Therefore, the condition has been removed from both permits.

Condition 4.:

~~Allowable emissions have been calculated assuming an operating schedule of 16 hours per day, 5 days per week, 51 weeks per year.~~

- (g) Condition 12 d. of Permit 870012-4 (for pouring and cooling), issued on September 21, 1987, and Condition 13 d. of Permit 870012-3 (for IML) require that the Permittee keep records of the daily hours of operation of the mold line as required to assure with the Conditions 4. which is removed. Therefore, the requirement to record keep is deleted from both permits.

~~12d. Daily hours of operation of the mold line.~~

~~13d. Daily hours of operation of the mold line.~~

- (h) Permit Number CP-0980012-01, issued on February 24, 1998, for the cleaning rooms contains Operation Condition 12 language limiting metal processing for the first 365 days of operation. This limit no longer applies and has been deleted as follows:
~~During the first 365 days of operation, the metal processed shall be limited such that the total metal processed divided by the accumulated days of operation shall not exceed 1095.89 tons per day.~~

- (i) Permit Number CP-0970012-03, issued on April 25, 1997, for the core rooms contains Operation Condition 10. language limiting raw material input for the first 12 months of operation. This limit no longer applies and has been deleted as follows:
~~During the first 12 months of operation, the input raw material usage shall be limited such that the total usage divided by the accumulated months of operation shall not exceed the limits specified in this permit.~~

- (j) All conditions from Certificates of Operation issued to the source.

Reason for not incorporating:

This Title V operating permit supersedes all previously issued operation permits.

- (k) All construction conditions from all previously issued permits.

Reason not incorporated: All facilities previously permitted have already been constructed; therefore, the construction conditions are no longer necessary as part of the operating permit. Any facilities that were previously permitted but have not yet been constructed would need new pre-construction approval before beginning construction.

Enforcement Issue

The source has the following enforcement actions pending:

- (a) Notice of violation, issued on April 25, 2002, consisting of non-compliance with the following conditions from permit 970012-03, issued on April 25, 1997:
 - (1) Condition 7 which required stack testing of the acid scrubber on the core making

- process was violated when not performed within the specified time,
- (2) Condition 8 which required 95% control efficiency of acid scrubber on the core making process was not demonstrated by stack testing,
 - (3) Condition 15 which required total enclosure of the core making process was not demonstrated by stack testing.
- (b) Retesting of acid scrubber on the core making process as required by OES in a certified letter was not performed within the specified time.
 - (c) The Impact Mold Line includes the following facilities which have VOC emissions in excess of 40 tons per year and have not been reviewed for BACT:
 - (1) One (1) Punch-up/Push-off process, identified as Unit 26, installed in 1987; and
 - (2) One (1) pouring/cooling line, identified as Units 5a and 5b, installed in 1988; and
 - (3) One (1) Sand Handling System, identified as Unit 4, installed in 1988; and
 - (4) One (1) Oscillating Shakeout Conveyor, identified as Unit 28, installed in 1989.
 - (d) IDEM is reviewing this matter and will take appropriate action.

Recommendation

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

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

An administratively complete Part 70 permit application for the purposes of this review was received on August 29, 1996. Additional information was requested on October 18, 2000, and July 25, 2001. Because of a multitude of changes, removals, and modifications of equipment and processes, a totally revised Part 70 permit application was received on February 22, 2002, and additional information was received on April 9, 2003.

Emission Calculations

See Appendix A of this document for detailed emissions calculations.

Potential To Emit

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

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	greater than 250
PM-10	greater than 250
SO ₂	less than 100
VOC	greater than 250
CO	greater than 250
NO _x	less than 100

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

HAP's*	Potential To Emit (tons/year)
Lead	61.05
Chromium	1.00
Nickel	0.92
Naphthalene	22.41
Triethylamine	227.42
Benzene	36.78
Toluene	13.28
Manganese	3.28
Phenol	8.07
Xylene	6.72
TOTAL	381.4

*For detailed HAPs calculations, see Page 14 of 14 of Appendix A of TSD.

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of PM10, VOC, and CO 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 2-1.1-1(16)) of any single HAP is equal to or greater than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination HAPs is greater than or equal to twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (c) Fugitive Emissions
 Since this type of operation is one of the twenty-eight (28) listed source categories under 326 IAC 2-2, the fugitive emissions are counted toward determination of PSD applicability.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 2002 OAQ emission data.

Pollutant	Actual Emissions (tons/year)
PM	53.75
PM-10	53.75
SO ₂	0.18
VOC	75.85
CO	24.9
NO _x	75.95
HAP	54.55

Potential to Emit After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 operating permit. See Page 14 of 14 of Appendix A for detailed calculations.

Process/facility	Potential to Emit (tons/year)							
	PM	PM-10	SO ₂	VOC	CO	NO _x	Pb	HAPs
Cupola Melt System (Unit 1N, 2N, and 3N) 1999	63.9	63.9	66.6	2.0	266.6	32.0	0.43	0.62
Impact Mold Line (Units 5a and 5b, 4, 26, 404, 28)1988	51.94	42.24	6.12	560		3.1	0.03	36.49
Block Shaking (Unit 44) 2001	15	23.4					2.43	3.24
Cleaning (Units 32, 33, 6) 1999	86.95	87.98	0.11	15.31	1.0	12.31	0.01	0.01
Sprue Removal (Unit 6) 1998	15.42	10.79		5.78				0.01
Core Room (Units 41, 42, 43, 44, 45, 46, 47A, 47B, 48A, 48B, 49A, 49B, 50A, 50B, TBD)1998	0.17	0.67	0.05	311.18	7.36	8.76		249.83
Core Sand Transfer (Unit 34)	17	17						
Refuse Bunker Area (Unit 34)1995	15	15						
Total Emissions	242.62	242.62	72.9	893.84	274	44.82	2.9	290.2

County Attainment Status

The source is located in Marion County.

Pollutant	Status
PM-10	attainment
SO ₂	maintenance
NO ₂	attainment
Ozone	maintenance
CO	maintenance
Lead	maintenance

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Marion County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (b) Marion County has been classified as attainment or unclassifiable for all criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

- (c) Fugitive Emissions
Since this type of operation is one of the 28 listed source categories under 326 IAC 2-2, the fugitive emissions are counted toward determination of PSD 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.

Federal Rule Applicability

- (a) This source is subject to the New Source Performance Standard, 326 IAC 12, (40 CFR 60, Subpart Dc, since operation commenced after June 9, 1989 and the maximum design heat input capacity is equal to or greater than ten (10) MMBtu/hr but less than one hundred (100) MMBtu/hr.
- (1) Daily natural gas consumption for each of the natural gas fired boilers, identified collectively as TBD, with maximum capacities of 10 million Btu per hour (MMBtu/hr) shall be recorded as per 40 CFR Part 60 Subpart Dc. Records shall be retained for a period of at least five (5) years from the date of the generation of the measurement or record.
- (2) Pursuant to 40 CFR 60 §60.48c(a), the owner or operator of this source shall submit notification of the date of construction or reconstruction, anticipated startup, and actual startup, as provided by §60.7 of this rule.
- (b) The National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63 Subpart T) is not applicable to this source. The degreasers do not use chlorinated solvents so 40 CFR 63, Subpart T does not apply.
- (c) The cupola system, the impact mold line, the pouring/cooling line (associated with the IML), the Core Room East, and fugitive emissions from each building housing any emissions source at the foundry are subject to the National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries, 40 CFR 63, Subpart EEEEE for Iron and Steel Foundries. A copy of the signed version of the MACT is currently available on the U.S. EPA website, <http://www.epa.gov/ttn/oarpg/t3pfpr.html>, and will be published in the *Federal Register*.

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

This rule has a future compliance date; therefore, the specific details of the rule and how the Permittee will demonstrate compliance are not provided in the permit. The Permittee shall submit an application for a significant permit modification nine months prior to the compliance date for the MACT that will specify the option or options for the emission limitations and standards and methods for determining compliance chosen by the Permittee. At that time, IDEM, OAQ will include the specific details of the rule and how the Permittee will demonstrate compliance. In addition, pursuant to 40 CFR 63, Subpart EEEEE, the Permittee shall:

- (1) Comply with the certification requirements in 40 CFR 63.7700(b) or prepare and implement a plan for the selection and inspection of scrap according to the requirements in 40 CFR 63.7700(c) no later than one year after the effective date of 40 CFR 63, Subpart EEEEE.
- (2) Submit all of the notifications required by 40 CFR 63.6(h)(4) and (5), 63.7(b) and (c); 63.8(e); 63.8(f)(4) and (6); 63.9(b) through (h) that apply to the affected source and chosen compliance method by the specified dates. These notifications include, but are not limited to, the following:
 - (A) An Initial Notification containing the information specified in 40 CFR 63.9(b)(2) no later than 120 days after the effective date of 40 CFR 63, Subpart EEEEE.
 - (B) A Notification of Compliance Status containing the information required by 40 CFR 63.9(h) in accordance with 40 CFR 63.7750(e). The Notification of Compliance Status must be submitted:
 - (i) Before the close of business on the 30th calendar day following completion of the initial compliance demonstration for each initial compliance demonstration that does not include a performance test; and
 - (ii) Before the close of business on the 60th calendar day following the completion of the performance test according to the requirement specified in 40 CFR 63.10(d)(2) for each initial compliance demonstration that does include a performance test.
 - (C) If required to conduct a performance test, a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin as required by 40 CFR 63.7(b)(1) and 40 CFR 63.7750(d).
 - (D) If required to use a continuous monitoring system (CMS), notifications, if required, as specified in 40 CFR 63.9(g), by the date of submission of the notification of intent to conduct a performance test.
 - (E) If required to conduct opacity or visible emissions observations, the anticipated date for conducting the opacity or visible emission observations specified in 40 CFR 63.6(h)(5) in accordance with the appropriate schedule specified in 40 CFR 63.9(f) as required by 40 CFR 63.7750(a).

State Rule Applicability - Entire Source

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

A Preventive Maintenance Plans (PMP) should have been developed for each facility that was formerly permitted as a registration level or higher. A Part 70 application requirement 326 IAC 2-7-4(c)(10) is a confirmation that the source maintains on-site a preventive maintenance plan as described in 326 IAC 1-6-3.

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

The source has submitted an Emergency Reduction Plan (ERP) on August 29, 1996. The ERP has been verified to fulfill the requirements of 326 IAC 1-5-2 (Emergency Reduction Plans).

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

Cupola Melt System (Emissions Units (Units) 1N, 2N, and 3N) and Cleaning Room (Units 32, 33, 6)

Installed in 1999

- (a) In order that the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) do not apply to the Cupola Melt System (Emissions Units 1N, 2N, and 3N), the emission of Carbon Monoxide (CO) shall be limited as follows (Table 1):

Table 1

Emission Unit ID	Description	CO	
		lb/ton	ton/year
1N	Cupola	1.333	266.6
2N	Electric Induction Holding Furnace	0	0
3N	Coke and Limestone Material	0	0
		<u>Total:</u>	<u>266.6</u>

The tons of metal produced in the Cupola Melt System (Emission Units 1N, 2N, 3N) shall be limited to 400,000 tons per 12 consecutive month period. This production limitation is equivalent to CO emissions of 266.6 tons per twelve (12) consecutive month period. While the total limited emissions of CO are greater than one hundred tons per year, PSD does not apply, because the contemporaneous increase in the past five years is 5.1 tons, and the net emissions decrease is 30,776.1 tons. See page 6 of 14 of Appendix A detailed calculations.

- (b) In order that the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) do not apply to the Cupola Melt System (Emissions Units 1N, 2N, and 3N), the emission of particulate matter (PM) shall be limited as follows (Table 2):

Table 2

Emission Unit ID	Description	PM	
		lb/ton	ton/year
1N	Cupola	0.7	140
2N	Electric Induction Holding Furnace	0.2	40
3N	Coke and Limestone Material	0.108	21.6
		<u>Total:</u>	<u>201.6</u>

The tons of metal produced in the Cupola Melt System (Emission Units 1N, 2N, 3N) shall be limited to 400,000 tons per 12 consecutive month period. This production limitation is equivalent to PM emissions of 201.6 tons per twelve (12) consecutive month period. While the total limited emissions of PM are greater than twenty five tons per year, PSD does not apply, because the contemporaneous increase in the past five years is 1.3 tons, and the net emissions increase is 14.1 tons. See page 6 of 14 of Appendix A detailed calculations.

- (c) In order that the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) do not apply to the Cupola Melt System (Emissions Units 1N, 2N, and 3N), the emission of sulfur dioxide (SO2) shall be limited as follows (Table 3):

Table 3

Emission Unit ID	Description	SO2
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		lb/ton	ton/year
1N	Cupola	0.333	66.6
2N	Electric Induction Holding Furnace	0	0
3N	Coke and Limestone Material	0	0
		<u>Total:</u>	<u>66.6</u>

The tons of metal produced in the Cupola Melt System (Emission Units 1N, 2N, 3N) shall be limited to 400,000 tons per 12 consecutive month period. This production limitation is equivalent to sulfur dioxide (SO₂) emissions of 66.6 tons per twelve (12) consecutive month period. The requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) do not apply because the source has netted out of PSD requirements. While the total limited emissions of SO₂ are greater than forty tons per year, PSD does not apply, because the contemporaneous decrease in the past five years is 17 tons, and the net emissions decrease is 42.2 tons. See page 6 of 14 of Appendix A detailed calculations.

- (d) In order that the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) do not apply to the Cupola Melt System, metal production shall not exceed 400,000 tons per consecutive twelve (12) month period, from the grey iron cupola, identified as 1N. VOC emissions shall not exceed 0.12 pounds of VOC per ton of metal produced. This is equivalent to 24 tons of VOC per twelve (12) consecutive month period.
- (e) The afterburner shall be operated at all times when the Cupola Melt System is in operation. When operating, the afterburner shall maintain a minimum average hourly operating temperature of 1372°F or the average hourly temperature determined during the most recent compliant stack test, as approved by IDEM. This average hourly temperature of 1372°F correlates to an overall CO control efficiency of at least 97.4% based on stack capture and destruction efficiency test conducted on February 20, 2002. Compliance with this average hourly temperature requirement satisfies the afterburner temperature requirement under 326 IAC 9-1-2.
- (f) The baghouses shall be operated at all times when the Cupola Melt System is in operation.
- (g) In order that the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) do not apply to the Cupola Melt System (Emissions Units 1N, 2N, and 3N), the emissions of particulate matter less than 10 microns in size (PM10) shall be limited as follows (Table 4):

Table 4

Emission Unit ID	Description	PM10	
		lb/ton	ton/year
1N	Cupola	0.112	22.4
2N	Electric Induction Holding Furnace	0.100	19.9
3N	Coke and Limestone Material	0.108	21.6
		<u>Total:</u>	<u>63.9</u>

The tons of metal produced in the Cupola Melt System (Emission Units 1N, 2N, 3N) shall be limited to 400,000 tons per twelve consecutive month period. This production limitation is equivalent to PM10 emission of 63.9 tons per twelve consecutive month period. While the total limited emissions of PM10 are greater than fifteen tons per year,

PSD does not apply, because the contemporaneous increase in the past five years is 0.8 tons, and the net emissions increase is 13.6 tons. See page 6 of 14 of Appendix A detailed calculations.

- (h) In order that the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) do not apply to the Cupola Melt System (Emissions Units 1N, 2N, and 3N),
 (1) the emissions of lead (Pb) shall be limited as follows (Table 5):

Table 5

Emission Unit ID	Description	Pb	
		lb/ton	ton/year
1N	Cupola	0.00462	0.924
2N	Electric Induction Holding Furnace	0.00109	0.218
3N	Coke and Limestone Material	0.00014	0.028
		<u>Total:</u>	<u>1.17</u>

While the total limited emissions of Pb are greater than 0.6 tons per year, PSD does not apply, because the contemporaneous increase in the past five years is zero tons, and the net emissions decrease is 0.15 tons. See page 6 of 14 of Appendix A detailed calculations.

- (i) Pursuant to CP-0980012-01, issued on February 24, 1998, in order that the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) do not apply to the Cleaning Room (Unit 32, 33), metal production shall not exceed four hundred thousand (400,000) tons of metal per twelve month consecutive period with compliance determined at the end of each month, and PM and PM10 emissions shall not exceed 0.433 pounds of PM and PM10 per ton of metal produced. This is equivalent to eighty-five (85) tons of PM and PM 10 per twelve (12) consecutive month period. While the total limited emissions of PM-10 are greater than fifteen tons per year, PSD does not apply, because the contemporaneous increase in the past five years is 0.8 tons, and the net emissions decrease is 13.6 tons. See page 6 of 14 of Appendix A detailed calculations.
- (j) In order that the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) do not apply to the Cupola Melt System (Emissions Units 1N, 2N, and 3N), the emission of nitrous oxides (NO_x) shall be limited as follows (Table 6):

Table 6

Emission Unit ID	Description	NO _x	
		lb/ton	ton/year
1N	Cupola	7.3	32.0
2N	Electric Induction Holding Furnace	0	0
3N	Coke and Limestone Material	0	0
		<u>Total:</u>	<u>266.6</u>

While the total limited emissions of NO_x are greater than forty tons per year, PSD does not apply, because the contemporaneous decrease in the past five years is 3.3 tons, and the net emissions increase is 13.6 tons. See page 6 of 14 of Appendix A detailed calculations.

Block Shaking Process (Unit 44) Installed in 2001

- (k) Pursuant to CP 097-12464-00012, issued on March 14, 2001, and in order that the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) do not apply to the three (3) shaker units, metal production shall not exceed 400,000 tons per consecutive twelve (12) month period, from the three (3) shaker units, identified as Unit 44. PM and PM10 emissions shall not exceed 0.075 pounds of PM or PM10 per ton of metal produced. This is equivalent to less than fifteen (15) tons of PM or PM10 per twelve (12) consecutive month period.

Core Room (Units 41, 42, 43, 44, 45, 46, 47A, 47B, 48A, 48B, 49A, 49B, 50A, 50B, TBD) Installed in 1998

- (l) Pursuant to CP-970012-03, issued on April 25, 1997, in order that the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) do not apply to the Core Room (Units 41, 42, 43, 44, 45, 46, 47A, 47B, 48A, 48B, 50, 51), the source shall process not more than two hundred ninety-eight thousand eight hundred forty (298,840) tons of cores per consecutive twelve (12) month period, twenty-four thousand nine hundred three (24,903) tons of cores per month, with compliance determined at the end of each month, (which is equivalent to 310.7 tons of VOC per year). While the total limited emissions of VOC are greater than forty tons per year, PSD does not apply, because the net emissions increase is 36.7 tons. See page 6 of 14 of Appendix A detailed calculations.

Impact Mold Line (Unit 5a, Unit 5b, and Unit 4) Installed in 1988

- (m) In order that the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) do not apply to the IML (Unit 5a, Unit 5b, and Unit 4), Unit 5a shall emit after control not more than 2.94 pounds of PM and PM 10 per hour, Unit 5b shall emit after control not more than one pound of PM and PM 10 per hour, and Unit 4 shall emit after control not more than 3.2 pounds of PM and PM10 per hour.

Impact Mold Line (Unit 26 and Unit 28) Installed in 1989

- (p) In order that the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) do not apply to the IML (Unit 26 and Unit 28), Unit 26 shall emit after control not more than 2.5 pounds of PM and PM 10 per hour, and Unit 28 shall emit after control not more than 2.2 pounds of PM and PM 10 per hour.

Refuse Bunker Area (Unit 34) Installed in 1995

- (r) Pursuant to CP 960012-02 issued on February 29, 1996, and an Agreed Judgement, 49F1294120V4977, dated January 29, 1996, and in order that the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) do not apply to the Refuse Bunker Area, Unit 34, the baghouse grain loading shall be 0.0044 gr/dscf and the air flow rate shall be 90152 acfm (3.4 pounds per hour (lb/hr)) which is equivalent to PM and PM-10 emissions of less than 15 tons per consecutive twelve month period. Compliance with this limit satisfies the requirements of 326 IAC 6-1-2.

The respective Baghouses shall be in operation at all times the facility being controlled is in operation, in order to comply with this limit.

326 IAC 2-6 (Emission Reporting)

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

326 IAC 5-1 (Opacity Limitations)

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 thirty percent (30%) 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

Cupola Melt System (Units 1N, 2N and 3N)

326 IAC 6-1-2 (Particulate Matter Limitations)

Pursuant to 326 IAC 6-1-2(e), gray iron foundries shall be limited to the following:

- (a) The cupola, 1N, of the gray iron foundry shall be limited to particulate matter emissions of no greater than thirty-four hundredths (0.34) g/dscm (fifteen hundredths (0.15) grain/dscf).
- (b) The electric induction furnace, 2N, is a melting process of the gray iron foundry which shall be limited to particulate matter emissions of no greater than sixteen-hundredths (0.16) g/dscm (seven-hundredths (0.07) grain/dscf).
- (c) The coke and limestone material handling shall be limited to particulate matter emissions of no greater than seven-hundredths (0.07) g/dscm (three-hundredths (0.03) grain/dscf).

326 IAC 7-1.1-2 (Sulfur Dioxide Emissions)

While 326 IAC 7-1.1-2 does apply, there are no applicable requirements to the combustion emissions of 1N, 2N, or 3N as they are non-fossil fuel fired units, rather than coal fired units.

326 IAC 9-1-2 (Carbon Monoxide Limitation)

Pursuant to 326 IAC 9-1-2, the emission of carbon monoxide from the grey iron cupola, identified as emission unit 1N, shall be controlled by a direct flame afterburner that maintains a minimum temperature of one thousand three hundred (1,300) degrees Fahrenheit for a minimum retention time of three-tenths (0.3) second.

Impact Mold Line (Pouring/Cooling Line (Units 5a, 5b), Punch-up/Push-off Process (Unit 26), Oscillating Shakeout Conveyor (Unit 28), and Sand Handling Process (Unit 4))

326 IAC 6-1-2 (Particulate Matter Limitations)

Pursuant to 326 IAC 6-1-2(a), the casting lines, Units 5a and 5b, Impact Mold Line, Unit 4, punch-up, Unit 26, shakers, Unit 28, shall be limited to particulate matter emissions of no greater than seven-hundredths (0.07) g/dscm (three-hundredths (0.03) grain/dscf).

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

The IDEM has information that indicates that this emission unit is subject to the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration). Therefore, the Permit Shield provided by Condition B.13 of this permit does not apply to this emission unit with regards to 326 IAC 2-2 (PSD). The OAQ will promptly reopen this permit using the provisions of 326 IAC 2-7-9 (Permit Reopening) to include detailed requirements necessary to comply with 326 IAC 2-2 (PSD) and a schedule for achieving compliance with such requirements.

Block Shaking Process (Unit 44)

326 IAC 6-1-2 (Particulate Matter Limitations)

Pursuant to 326 IAC 6-1-2, particulate matter emissions from the shakers and tray dumps, Unit 44, shall be limited to particulate matter emissions of no greater than seven-hundredths (0.07) g/dscm (three-hundredths (0.03) grain/dscf).

Cleaning Department (Units 32, 33, 6)

326 IAC 6-1-2 (Particulate Matter Limitations)

Pursuant to 326 IAC 6-1-2, particulate matter emissions from the Cleaning Department, Units 32, 33, and 6, shall be limited to particulate matter emissions of no greater than seven-hundredths (0.07) g/dscm (three-hundredths (0.03) grain/dscf).

Core Room (Units 41, 42, 43, 44, 45, 46, 47A, 47B, 48A, 48B, 50A, and 50B)

326 IAC 8-1-6 (BACT)

Pursuant to 326 IAC 8-1-6, all core making machines shall be operated under total enclosure and overall control efficiency of the acid scrubbers shall be no less than 95% for TEA.

During the manufacture of the core (i.e. operation of the core box) there are no permanent openings (i.e. no NDO's) in the core box. The two-part mold comprising the "core box" is closed and interlocked "during operation" of the core-making equipment. The core box is opened for removal of the cured core, but not until after the introduction of TEA has ceased and the purge cycle has been completed. The purge cycle is necessary to purge excess TEA to the scrubber and maintain the quality of cores.

Based upon this, the two-part mold comprising the core box meets the requirements for a permanent total enclosure and does not contain any natural draft openings. All emissions from the core box are ducted to the associated acid scrubber. Although the source cannot comply with Method 204, the source can comply with Procedure T. Therefore, this construction is in compliance with the total enclosure requirement of 8-1-6 (BACT), because the original BACT did not specify Method 204.

Overall Control Efficiency requirement: The stack test performed on January 8, 2003, and approved by IDEM showed that the overall control efficiency of the acid scrubber is 97.3%. This is based on mass balance. The test demonstrated compliance with BACT.

326 IAC 6-1-2 (Particulate Matter Limitations)

Pursuant to 326 IAC 6-1-2, particulate matter emissions from the Core Room, Units 41, 42, 43, 44, 45, 46, 47A, 47B, 48A, 48B, 50A, and 50B shall be limited to particulate matter emissions of no greater than seven-hundredths (0.07) g/dscm (three-hundredths (0.03) grain/dscf).

Core Room (TBD)

326 IAC 6-2-4 (Particulate Emissions Limitations for Sources of Indirect Heating)

The natural gas fired boilers, identified as TBD, are subject to the provisions of 326 IAC 6-2-4 because they are located in Marion County and were constructed prior to September 21, 1983.

Particulate emissions from indirect heating facilities shall be limited by the following equation:

$$Pt = 1.09/Q^{0.16} = 1.09/20^{0.16} = 0.67$$

where Pt = Pounds of particulate matter emitted per million Btu (lb/MMBtu) heat input.

Q = Total source maximum operating capacity rating in million Btu per hour (MMBtu/hr) heat input.

Therefore, particulate emissions from the natural gas fired boilers, identified as TBD shall not exceed 0.67 pounds per million Btu (lbs/MMBtu). The combustion of natural gas yields negligible particulate emissions. Therefore, the boilers are in compliance with 326 IAC 6-2-4.

Boilers (Insignificant Activity)

326 IAC 6-1-2 (Particulate Emissions Limitations)

Pursuant to 326 IAC 6-1-2(b)(3), the particulate emissions from the two (2) 7 MMBtu per hour heat input boilers shall be limited to one-hundredth (0.01) grain per dry standard cubic foot (dscf).

Refuse Bunker Area (Unit 34)

326 IAC 6-1-2 (Particulate Matter Emissions)

Pursuant to 326 IAC 6-1-2, particulate matter emissions from Refuse Bunker Area, Unit 34, shall be limited to particulate matter emissions of no greater than seven-hundredths (0.07) g/dscm (three-hundredths (0.03) grain/dscf).

Degreasing (Insignificant Activity)

326 IAC 8-3-2 (Cold Cleaner Operations)

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

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

326 IAC 8-3-5 (Cold Cleaner Degreaser Operation and Control)

(a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), for cold cleaner degreaser operations without remote solvent reservoirs constructed after July 1, 1990, the Permittee shall ensure that the following control equipment requirements are met:

- (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
 - (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F));
 - (B) The solvent is agitated; or
 - (C) The solvent is heated.
- (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.
- (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
- (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.

- (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (B) A water cover when solvent is used is insoluble in, and heavier than, water.
 - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller of carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the permittee of a cold cleaning facility construction of which commenced after July 1, 1990, shall ensure that the following operating requirements are met:
 - (1) Close the cover whenever articles are not being handled in the degreaser.
 - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
 - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

Testing Requirements

In order to demonstrate compliance with permit conditions, the Permittee shall perform testing on the equipment and parameters listed below utilizing methods as approved by the Commissioner. Testing shall be conducted in accordance with Section C- Performance Testing. Stack testing is required as follows:

- (a) Cupola, 1N, required testing every 2 ½ years for PM and CO. Testing was last performed in 1999. Testing will be required within 180 days after issuance of this Part 70 permit.
- (b) Core Making Scrubbers every 2 ½ years for VOC and TEA. Testing was last performed January 8, 2003. Testing will be required in June of 2005.
- (c) The Impact Mold Line, sand handling system, Unit 4, wet scrubber every 5 years for PM and PM10. Testing was last performed in 1991. Testing will be required within 180 days after issuance of this Part 70 permit.
- (d) The Block Shakers Process, Unit 44, every 5 years for PM and PM10. Testing last performed in June 2002. Testing will be required by June of 2007.
- (e) Cleaning every 5 years for PM and PM10. Testing was last performed in 1999. Testing will be required within 180 days of issuance.
- (f) Refuse Bunker, Unit 34, every 5 years for PM and PM10. Testing was last performed in 1996. Testing will be required within 180 days after issuance of this Part 70 permit.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state

and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ and OES, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

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

Compliance monitoring plans for demonstrating compliance are as follows under Rule 326 IAC 2-7-5(3) which requires all permitted sources to demonstrate that all emitting units are in continuous compliance with all "applicable requirements" as defined by 326 IAC 2-7-1(6). Compliance is demonstrated by taking sufficient measurements of emissions or operating parameters or by gathering other data. The following emission units are subject to compliance monitoring plans:

(a) Cupola Afterburner:

A continuous monitoring system shall be calibrated, maintained, and operated on the cupola for measuring temperature of the cupola gas stream. The output of this system shall be recorded as a minute average. From the date of issuance of this permit until the approved stack test results are available, the Permittee shall take appropriate response steps whenever the hourly average temperature of the cupola gas stream is below 1372 °F. This minimum temperature requirement applies at all times during cupola operation, except for the following:

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

An hourly average temperature that is below 1372 °F is not a deviation from this permit.

(b) Coldbox Lines A and B, TEA Scrubbers for VOC and TEA control:

- (1) A continuous flow meter and pH meter shall be calibrated, maintained, and operated for the TEA scrubbers. The flow rate and pH shall be recorded once per shift. The minimum flow rate shall be 125 gallons per minute, and the pH shall be no more than 5. The pressure drop shall be in the range of 2 to 6 inches of water. When for any one reading, the pressure drop across the baghouse is outside the normal range of 2 and 6 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. When for any one reading, the pH is greater than the normal maximum of 5 or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. When for any one reading, the flow rate is less than the normal minimum of 125 gallons per minute or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports.
- (2) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the reading is outside the above

mentioned ranges for any one reading. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

- (c) Baghouses and wet scrubbers for PM control (all information on ranges have been specified from the manufacturer):

Emissions Unit	Control Device ID#	Stack ID#	Once per shift VEs (Y or N)	Once per shift Pressure Drop Reading ² (Y or N)	Pressure Drop range (inches of water)
Unit 32 (Finishing A)	CE-1591	S-1591	Y	Y	2 to 10
	CE-1592	S-1592	Y	Y	2 to 10
Unit 33 (Finishing B)	CE-1593	S-1593	Y	Y	2 to 10
	CE-1594	S-1594	Y	Y	2 to 10
Unit 1N (Cupola)	CE-2720E	S-2720E	Y	Y	2 to 12
	CE-2720W	S-2720W	Y	Y	2 to 12
Unit 2N (Elect. Ind. Furnace)	CE-1530N	S-1530N	Y	Y	2 to 12
Unit 3N (Coke/Limestone)	CE-1527N	S-1527	Y	Y	2 to 6
	CE1527M&S	S-1527	Y	Y	2 to 6
Unit 404 (Sand/Screen Bleed off)	CE-1504	S-1504	Y	Y	2 to 8
Unit 5a and 5b (Pouring and Cooling Lines)	CE-1502	S-1502	Y	Y	2 to 8
Unit-6 (Sprue Removal)	CE-1513	S-1513	Y	Y	2 to 8
Unit-26 (Punch Up, Sand Screen Bleed Off, North & South Mixers)	CE-1504	S-1504	Y	Y	2 to 8
Unit-28 (Shakeout vibrating conveyor)	CE-1503N, M, S	S-1503a S-1503b	Y	Y	2 to 8
	CE-1595	S-1595	Y	Y	1 to 10
Unit-45 Sand Transfer	CE-1586	S-1586	Y	Y	2 to 6

Emissions Unit	Control Device ID#	Stack ID#	Once per shift VEs (Y or N)	Once per shift Pressure Drop Reading ² (Y or N)	Pressure Drop range (inches of water)
Unit 44 (Blocker Shakers)	CE-1596	S-1596	Y	Y	1 to 10
	CE-1520S	S-1520S	Y	Y	1 to 10
Unit 41 (Silo)	CE-1586	S-1586	Y	Y	2 to 6
Unit 42 (Silo)	CE-1582	S-1582	Y	Y	2 to 6
Unit 43 (Silo)	CE-1583	S-1583	Y	Y	2 to 6
Unit 44 (Silo)	CE-1584	S-1584	Y	Y	2 to 6
Unit 47A (Coldbox Mixers- West/Line A/System #1)	CE-1581	S-1581	Y	Y	2 to 6
	CE-1582	S-1582	Y	Y	2 to 6
Unit 47B (Coldbox Mixers- East/Line B/System #2)	CE-1583	S-1583	Y	Y	2 to 6
	CE-1584	S-1584	Y	Y	2 to 6
Unit 48A (Coldbox Machines- West/Line A/System #1)	CE- 8180	S-8180W	N	Y	acid scrubber (> or =125 gpm)
Unit 48B (Coldbox Machines- East/Line B/System #2)	CE-8280	S-8280E	N	Y	acid scrubber (> or =125 gpm)
Unit-46 Rail Sand Unloading	CE-1585	S-1585	Y	Y	2 to 6
Unit-34 Refuse Bunker	CE-1522	S-1522	Y	Y	2 to 10
Unit 4 (IML)	CE-1501E	S-1501E	Y	Y	8 to 12
	CE-1501W	S-1501W	Y	Y	8 to 12
	CE-1502	S-1502	Y	Y	2 to 8

⁽³⁾ Wet scrubber control

(1) Baghouses and Wet Scrubber Operations:

(A) Pressure Drop Monitoring:

The Permittee shall record the total static pressure drop across the baghouses or wet scrubber used in conjunction with the equipment listed in the table above, at least once per shift when the respective process is in operation and venting to the atmosphere. When for any one reading, the pressure drop across any baghouse or wet scrubber is outside the normal range listed in the table above or a range established during the latest stack test, the Permittee shall take reasonable response steps in

accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. 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 - Compliance Response Plan -Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

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

- (B) An inspection shall be performed each calender quarter of all baghouses controlling operations when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.
 - (C) An inspection shall be performed each calender quarter the scrubbers when venting to the atmosphere. A scrubber inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors.
 - (D) Visible Emissions Notations:
 - (i) Visible emission notations of the stack exhausts listed in the table above shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
 - (ii) 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.
 - (iii) 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.
 - (iv) 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.
 - (v) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.
- (2) TEA Scrubber Operation:
- (A) The Permittee shall record the pH of the TEA scrubbers, the flow rate, and the differential static pressure once per shift when the respective process is in operation and venting to the atmosphere. When for any one reading, the pH is greater than the normal maximum of 5, the flow

rate is greater than the normal maximum rate of 125 gallons per minute, and/or the pressure drop is outside the normal range of 2 to 6 inches of water, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Failure to Take Response Steps. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

- (B) The Permittee shall perform an inspection of the water spray pattern while the scrubber is in operation and venting to the atmosphere at least once per quarter. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the spray pattern is not correctly covering the scrubber packing material. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

Conclusion

The operation of this grey iron foundry, including core making, metal melting, sand molding, cleaning and finishing of final cast pieces to produce engine block castings shall be subject to the conditions of the attached proposed Part 70 Permit No. T097-6485-00012.

**Indiana Department of Environmental Management
Office of Air Quality
and
Indianapolis Office of Environmental Services**

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

Source Name: Daimler Chrysler Corporation - Indianapolis Foundry
Source Location: 1100 South Tibbs Avenue, Indianapolis, Indiana 46241
County: Marion
SIC Code: 3321
Operation Permit No.: T097-6485-00012
Permit Reviewer: Angelique Olinger

On December 31, 2003, the Office of Air Quality (OAQ) and the Office of Environmental Services (OES) had a notice published in the Indianapolis Star, Indianapolis, Indiana, stating that Daimler Chrysler Corporation - Indianapolis Foundry had applied for a Part 70 Operating Permit for the operation of a grey iron foundry, including core making, metal melting, sand molding, cleaning and finishing of final cast pieces to produce engine block castings. The notice also stated that OAQ and OES proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of sixty (60) days to provide comments on whether or not this permit should be issued as proposed.

Written comments were received from the Applicant on March 1, 2004. Upon further review, the OAQ and OES have decided to make the following revisions to the draft Part 70 Operating Permit. The TSD will remain as it originally appeared when published. Changes to the permit or technical support material that occur after the permit has been published are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision. Bolded language has been added, and the language with a line through it has been deleted. The Table Of Contents has been modified to reflect these changes. These comments and OES responses, including changes to the permit, are as follows:

Comment 1:

General Comment Regarding Monitoring/Testing Requirements: On Thursday, January 22, 2004, the United States Environmental Protection Agency (EPA) published a final rule, *Revisions To Clarify the Scope of Certain Monitoring Requirements for Federal and State Operating Permits Programs*, in the Federal Register. The rule becomes effective on February 23, 2004. The rule ratifies certain language for the state and federal operating permits program rules under Title V of the Clean Air Act (CAA) pertinent to monitoring requirements. In addition, the EPA announced its decision to decline to adopt the changes to the regulatory text of the monitoring rules that were proposed on September 17, 2002.

The final rule also states EPA's different interpretation of the "umbrella monitoring" rules (40 CFR Sections 70.6(a)(3) and 71.6(c)(1)) from that set forth in the preamble to the umbrella monitoring rules is that they do not establish a separate regulatory standard or basis for requiring or authorizing review and enhancement of existing monitoring provisions of the operating permit rules. According to the EPA, Umbrella Monitoring rules do not provide a basis for adding monitoring to Title V permits independent of monitoring required under existing federal air pollution control rules and State implementation plan (SIP) rules (i.e., monitoring required under applicable regulations).

The EPA's interpretation of the Umbrella Monitoring rule is to require that Title V permits contain monitoring required under applicable requirements, including monitoring required under the compliance assurance monitoring (CAM) rule where it applies, and such monitoring as may be required under the periodic monitoring rules. Together, such monitoring will constitute monitoring sufficient to assure compliance with the Act, according to the EPA.

Based on the above, adding any additional monitoring and stack testing, for sources for which the underlying regulations already specify monitoring and recordkeeping requirements, is unwarranted and is contrary to the State and Federal Title V regulations.

Response 1:

IC 13-14-1-13 (Duties of the Department: Monitoring and Reporting) states the following:

The Commissioner shall establish and administer monitoring and reporting requirements as necessary to carry out the duties and exercise the powers provided in the following:

- 1) Air pollution control laws.
- 2) Water pollution control laws.
- 3) Environmental management laws.

This statute clearly provides broader authority than just allowing the Commissioner to simply copy monitoring and reporting requirements that are specifically established in some other law.

Additionally, the provisions of 326 IAC 2-7-5(3) state that the Part 70 permits must include: "Monitoring and related record-keeping and reporting requirements which assure that all reasonable information is provided to evaluate **continuous compliance** with the applicable requirements." The rule goes on to state that the provisions that correspond to 40 CFR 70.6(a)(3) are minimum requirements. There are no other rules applicable to this source that already include the level of detailed monitoring and related record keeping and reporting requirements necessary to assure that all reasonable information is provided to evaluate continuous compliance; therefore, as required by 326 IAC 2-7-5(3), additional compliance monitoring, record keeping and reporting requirements must be included in the Part 70 permit.

Comment 2:

General Comment Regarding Monitoring/Testing Requirements: The requirements to perform visible emissions observations and monitor the pressure drop for the control devices associated with certain dust collectors on a per shift basis is unwarranted and burdensome and should be reduced. Periodic stack testing (i.e., once every five years) for a representative number of similar emission units (i.e., approximately 25%) combined with a parametric monitoring requirement (e.g., daily visible emissions observations) would constitute adequate periodic monitoring because it occurs on a regular basis and is capable of providing a reasonable assurance of compliance.

Daimler Chrysler is not aware of any published EPA or IDEM guidance that would require the imposition of stringent and duplicative monitoring requirements without considering technical feasibility of the monitoring method, economic burden and safety issues imposed on the facility operator and without a direct correlation to predicting, maintaining or documenting compliance. Daimler Chrysler believes that the monitoring requirements proposed by IDEM to be included in the Part 70 Operating Permit are in excess of what is required by the controlling state regulation (as set forth in section 326 IAC 2-7-5(3)(a)(II)), and go beyond the scope of IDEM's authority.

Further, the monitoring requirements proposed by IDEM to be included in the Part 70 Operating Permit are not mandated by the Clean Air Act, the implementing federal regulations or by any guidance issued by the EPA.

Periodic stack testing of a representative quantity of similar emission units, combined with a single parametric monitoring method, constitutes adequate periodic monitoring because they will occur on a regular basis and provide a reasonable assurance of compliance. Furthermore, a *per-shift* frequency for these parameters is overly burdensome as well and does not improve the effectiveness of the monitoring program in this particular case. Clearly, the appropriateness of any monitoring parameter and its frequency should be evaluated on a case-by-case basis and Daimler Chrysler believes that for those small particulate matter sources at Daimler Chrysler subject to a periodic monitoring requirement, daily visible emissions notations in conjunction with periodic stack testing is the most appropriate monitoring program. The following should also be considered:

- The requirements for per shift visible emission notations and pressure drop readings create technical issues, safety concerns and unjustified costs without providing a corresponding increase in the assurance of compliance. These issues include the requirement for safe access to conduct the required monitoring and the manpower that would be required to take and record hundreds of "observations" during a normal work week for the second shift and (during the summer months) for the third shift. These issues are substantially minimized if the requirement is of daily frequency.
- Daimler Chrysler is aware of other issued permits by the State of Indiana that have no routine monitoring requirements or that have a requirement to conduct visible emissions notations less frequently than per shift and with no or limited pressure drop monitoring requirements for control devices associated with small particulate matter sources. It would therefore appear that similar monitoring for like sources at the IFP should suffice as adequate assurance for the continued proper operation of the particulate matter control devices and demonstration of ongoing compliance.

In short, even EPA's Periodic Monitoring guidance would require no more than a periodic stack testing combined with daily visible emissions notations (or other suitable parametric monitoring requirement). This combination of monitoring will allow Daimler Chrysler to fully assess and assure compliance with the applicable requirements of the Part 70 operating permit.

Response 2:

As discussed in the response to comment 1, IDEM and OES do have the authority to require compliance monitoring. Compliance monitoring conditions are in the permit in order to ensure continuous compliance with the requirements. Less frequent monitoring would allow sporadic use of compliance monitoring, which would not accomplish the purpose of compliance monitoring. The monitoring of the pressure drop of the baghouses and visible emissions provides an indication of whether the control device is operating properly. Monitoring of the static pressure drop and opacity can alert the operator to relative changes (such as dust cake resistance) or failed bags, over a period of time. The operator can use this information to chart trends and determine if the unit is operating within the optimal range as determined by baseline testing of the unit and manufacturer's specifications. Pressure drop is an indicator of a variety of conditions within the baghouse. Any deviations from the normal operational range of the unit, whether gradual or sudden, should alert the operator that the unit needs maintenance. Baghouse failure can occur suddenly; therefore monitoring of baghouse operational parameters should be more frequent than weekly or even daily in such cases where a source operates more than one shift per day. OES and IDEM, OAQ believe that visible emissions notations and pressure drop monitoring once per operating shift are a reasonable requirement.

As for safety, during times of inclement weather, it is permissible to take visible emissions notations from the ground, where even if the stack itself is not visible, excess opacity from a baghouse would be visible. This is not the preferred method during times of normal weather conditions; however to assure safety of the employees, OES and IDEM, OAQ will accept this method in place of viewing the actual stack, during times of inclement weather. During times of inclement weather when viewing of the actual stack is not practical, the records of the visible emissions notations should include a statement that visible emissions were observed from the ground where the stack itself was not clearly visible and should also include a description of the type of inclement weather which prevented viewing the stack from the rooftops.

Daimler Chrysler Corporation has not supplied enough information to determine whether a lesser frequency will provide the information necessary to evaluate continuous compliance with applicable requirements. If, after collecting and evaluating the information, the Permittee feels that such a demonstration can be made, then they can submit that information as part of an application for a significant permit modification.

Comment 3:

In the draft Part 70 Operating Permit, OES and IDEM, OAQ have proposed new emissions limitations, operating restrictions and/or production limitations based on the applicability of the requirements of the Prevention of Significant Deterioration ("PSD") pre-construction permitting program set forth in 40 CFR 52.21 and 326 IAC 2-2, to specific emission units and/or manufacturing operations at the IFP. However, DCC has not requested approval from OES or IDEM, OAQ to undertake any physical or operational changes at the IFP that would be subject to the PSD pre-construction permitting requirements. Instead, in the administrative process for issuance of a final Part 70 Operating Permit OES and IDEM, OAQ attempt to apply retroactively the PSD pre-construction permitting requirements to projects undertaken by DCC at the IFP many years ago. Those projects were undertaken by DCC only after submittal of the required permit applications to OES and/or IDEM, OAQ and only after issuance by OES and/or IDEM, OAQ (or the predecessor permitting authority), of a valid Construction Permit or approval for each specific project.

The legal issues, environmental concerns and/or technical deficiencies with regard to OES' and/or IDEM, OAQ's proposal to apply PSD pre-construction permitting requirements to historic projects undertaken at the IFP are set forth below:

- Creation of new "applicable requirements" can not be accomplished through the Part 70 permitting process. DCC objects to creation of new "applicable requirements," specifically new and more stringent emission limitations, operating restriction and production limitations, in the draft Part 70 Operating Permit based on OES' and/or IDEM, OAQ's proposed application of the PSD pre-construction permitting requirements to existing emissions sources, units and/or processes at the IFP. In its Part 70 permit application, DCC identified as "applicable requirements" the emissions limitations, control requirements, operating restrictions and production limitations that were contained in previously-issued Construction Permits for existing emissions sources and processes at the IFP. However, the draft permit does not incorporate as "applicable requirements" those terms and conditions of previously issued Construction Permits, but instead includes new emission limits, operating restrictions, and production limitations that OES and/or IDEM, OAQ have attempted to create as new "applicable requirements" to be included in the Part 70 Operating Permit. The authority provided under the federal Clean Air Act, Indiana statutes and municipal ordinance does not allow the creation of new "applicable requirements" in the Part 70 permitting process.

- Creation of New “Applicable Requirements” causes supersession of existing applicable requirements. The final Part 70 Operating Permit may not supersede, void, replace, or otherwise eliminate the independent enforceability of terms and conditions included in previously issued SIP-approved Construction Permit. To assure compliance with “applicable requirements” such as SIP-approved permit terms and conditions, the final Part 70 Permit should record those requirements, but can not eliminate their independent legal existence and enforceability under Title I of the Clean Air Act (i.e., may not supersede them).

OES and IDEM, OAQ can not utilize the Part 70 permitting process to supersede, void, replace or otherwise eliminate the “applicable requirements” created by the construction permitting procedures and previous permit determinations made by OES and/or IDEM, OAQ (or predecessor permitting authorities). SIP-approved permits must remain in effect because they are the legal mechanism through which the substantive requirements of the Clean Air Act, federal regulations and federally-approved SIP regulations become applicable, and remain applicable, to individual sources. Only through the PSD, non-attainment New Source Review or minor source construction permitting programs can the permitting authority impose source-specific terms and conditions in legally enforceable permits.

- Current Application of PSD Requirements to Historic Modifications Causes Forfeiture of DCC’s Rights to Avoid PSD Requirements. PSD pre-construction permitting requirements are applicable to proposed new “major stationary sources” and “major modifications” of existing major sources. There are specific regulatory definitions and criteria that are used to determine applicability of PSD requirements to a particular proposed new source or modification to an existing source. This is particularly applicable to proposed operational or physical modifications at an existing source.

OES’ and IDEM, OAQ’s proposed application of the PSD pre-construction permitting requirements retroactively to historic projects undertaken at the IFP would unilaterally confiscate DCC’s rights to comply with applicable regulatory requirements through other available legal measures. Had the permitting authority determined that PSD requirements applied at the time those projects were being permitted, DCC would have had a number of options to pursue to avoid PSD requirements, satisfy PSD requirements in some other fashion or decide not to proceed with the project at all. It also ignores the “netting analysis” and determinations that PSD did not apply to a number of the modifications undertaken at the IFP that were issued Construction Permits.

- Indiana Law Prohibits Revocation and Reissuance or Unilateral Revisions to Previously-Issued Construction Approvals. Indiana law specified the circumstances to allow OES an/or IDEM, OAQ to revoke and reissue or unilaterally revise the terms and conditions of previously -issues Construction Permits. Those circumstances do not exist with respect to the IFP and attempts by OES and IDEM, OAQ to revoke, revise or modify the requirements of previously-issued Construction Permits through the draft Part 70 Operating Permit would violate Indiana law.

The Technical Support Document contains no justification or rationale to support the proposed revisions or modifications of previously issued Construction Permits and the decisions to utilize the Part 70 permitting process to accomplish that result. There exists no administrative record supporting a determination to revise or delete the “applicable requirements” of previously-issued construction approvals an/or permit decisions.

- Inconsistent actions for similar sources results in arbitrary and capricious action. In issuing final Part 70 Permits, OES and IDEM, OAQ are not implementing a consistent policy of applying PSD pre-construction and/or non-attainment New Source Review requirements to historic modifications made at all "major stationary sources" in the state of Indiana. OES and IDEM, OAQ have not taken the same approach in Part 70 Operating Permits issued to other similar industrial sources.

In the exercise of the powers granted to them by state, OES and IDEM are subject to the constitutional command of equal protection of the laws, which means equal rights for all similarly situated parties. Failure in this respect, which extends beyond the rudimentary requirements of fair play, amounts to unreasonable and arbitrary action.

- Modifications of past permit approvals are time barred by applicable state of limitations and equitable principles. The Indiana states impose states of limitations that prevent OES and IDEM, OAQ from revoking and reissuing, revising or modifying previous permit determinations for projects undertaken at the IFP. OES and IDEM, OAQ attempt to change final permit determinations that were made decades ago. Given the substantial amount of time that has gone by and the unfettered opportunity to discover any alleged "mistakes" made in the previous permitting actions, IDEM, OAQ is prevented by law and/or equitable considerations from reconsidering and revisit its previous permit determinations.

Response 3:

Indiana's Part 70 Operating Program approved by US EPA is a combined New Source Review (NSR) and Part 70 Operating Permit Program. This allows, IDEM, OAQ and OES to change NSR requirements through the Part 70 Operating Permit. IDEM and OES have established a US EPA - approved protocol for the procedures to be used when incorporating the provisions of previously issued permits into Part 70 Operating Permits and for combining NSR permits with Part 70 Operating Permits. Individual provisions of previously issued permits may be incorporated as originally stated, revised, or deleted as described by these procedures. IDEM and OES may supersede previously issued permits in whole or in part under these procedures as long as the Technical Support Document identifies the previously established applicable requirements that will be revised or deleted and the basis for the revisions or deletions.

In comments and responses that follow in this addendum, this issue will be visited on a case-by-case basis. All emissions limitations, operating restrictions, and productions limitations are consistent with the applications and technical support for previous Construction Permits issued to Daimler Chrysler. These limitations and restrictions do keep Daimler Chrysler out of PSD requirements, which is clearly stated throughout the permit. If PSD applicability was not mentioned in a previous construction permit, that does not mean that applicability can not be discussed in the Part 70 Operating Permit. In order that this Part 70 Operating Permit be complete, PSD applicability must be thoroughly discussed so that there is no question as to whether PSD applies. The limits that have thus far prevented PSD from applying to Daimler Chrysler must be established to show that PSD has not been triggered.

As stated in the TSD, 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. Terms and conditions of previous permits that have been revised or deleted are clearly explained in the Existing Approvals sections of the TSD.

IDEM, OAQ and OES are not attempting to cause forfeiture of DCC's rights to avoid PSD requirements. OES and IDEM, OAQ only attempt to show that limits and restrictions set forth in previously issued

permits already avoid PSD requirements. As stated above this Part 70 Operating Permit does supersede all previous registrations and permits. However, none of the previous registrations or permits have been revoked, revised, or modified.

Comment 4:

Section A.2 (a) (3) and Section D.1 (3), Cupola Melt System: While Agreed Judgement 49F129412OV4977 did require Daimler Chrysler to apply for and obtain a construction permit for the installation of Baghouse CE-1527, the Agreed Judgement should not be referenced in the permit because it does not impose any continuing obligation. Only Construction Permit CP 960012-01 should be identified in the permit in association with Baghouse CE-1527. Also, Baghouse CE-1527N in the draft permit is mistakenly listed as CE-1527M.

Response 4:

Section A.2 (a) (3) and Section D.1 Facility Description (3), describing the Cupola Melt System coke/limestone area have been changed as follows:

- (9) One (1) coke/limestone area (for introduction into the cupola), identified as Unit 3N, installed in 1996, with maximum capacities of 10.9 tons of coke per hour and 2 tons of limestone per hour, using two (2) baghouses, identified as CE-1527M N and CE-1527 M N&S, for PM control, and exhausting to stack S-1527. (~~CE-1527N was installed based on an Agreed Judgement 49F129412OV4977.~~)

Comment 5:

Section A.2(b)(2), (3), and (4), and Section D.2(b)(2), (3), and (4), Impact Mold Line: The Impact Mold Line (IML) was permitted in 1987 and installed in 1988. All of the installation dates should read 1988. Also, all of the control devices associated with the IML were installed for control of particulate matter (PM). Some of the descriptions for the IML state that the control devices are for control of PM while other conditions do not contain the comment. Daimler Chrysler has requested that the descriptions be consistent.

Response 5:

Section A.2(b), and Section D.2 Facility Description, describing the Impact Mold Line have been changed as follows:

- (b) One (1) Impact Mold Line, consisting of:
 - (1) One (1) pouring/cooling line, consisting of two (2) pouring furnaces, and a mold cooling line, identified as Units 5a and 5b, installed in 1988, with a combined maximum capacity of 75 tons of melted metal per hour and an effective maximum capacity of 69.9 tons of melted metal per hour based on the most recent stack test for the cupola, using a fabric filter Baghouse, identified as CE-1502, as PM control, and exhausting to stack S-1502. (The emissions from the sand homogenizer and basement sand transfer shakers of the Green Sand System are also controlled by Unit CE-1502.)
 - (2) One (1) Sand Handling System, consisting of sand handling conveyors/belts, mixers, bucket elevator, cooling drum and impact mold station, identified as Unit 4, installed in 1988, with a maximum capacity of 450 tons of sand per hour, using

two (2) venturi type wet collectors, identified as CE-1501E and CE-1501W, **for PM control**, exhausting to stacks S-1501E and S-1501W.

- (3) One (1) Punch-up/Push-off process, identified as Unit 26, installed in ~~1987~~ **1988**, and Sand Screening/Bleed off, Unit 404, with a maximum capacity of 75 tons of melted metal per hour and an effective maximum capacity of 69.9 tons of melted metal per hour based on the most recent stack test for the cupola, using a fabric filter Baghouse, identified as CE-1504, as PM control, and exhausting to stack S-1504. (~~CE-1504 was installed based on an Agreed Judgement 49F1294120V4977, dated January 29, 1996.~~)
- (4) One (1) Oscillating Shakeout Conveyor, identified as Unit 28, installed in ~~1989~~ **1988**, with a maximum capacity of 75 tons of melted metal per hour and an effective maximum capacity of 69.9 tons of melted metal per hour based on the most recent stack test for the cupola, using two (2) fabric baghouses, CE-1503N, M, S, and CE 1595, as PM control, and exhausting to stacks S-1503, S-1504, and S-1595, respectively.

Comment 6:

Section A.2(e) (4), and Section D.5 (d), Core Room West:

- (a) Daimler Chrysler believes it is inappropriate to include triethylamine (TEA) and resin usage rates in a description and requests that such references be removed.
- (b) The core room description incorrectly states that the combined System 1 & 2 sand core production rate of 298, 840 is equivalent to 6.9 tons per hour.
- (c) Daimler Chrysler requests that the description of the core drying ovens indicate that they are not subject to the New Source Performance Standards (NSPS) because they do not meet the definition of a steam generating unit.
- (d) The acid scrubber was only designed and installed for the control of TEA and should not be considered a general control for all volatile organic compounds.

Response 6:

(a): TEA and resin usage rates must be included because they describe the emissions of the unit. Therefore, the usage rates of resin and TEA remain as part of the description of the core room.

(b), (c), and (d): Section A.2 (e) (4), and Section D.5 (d) Facility Description, describing the Core Room West Line have been changed as follows:

- (4) Core Room West/Line A/System #1 core making line, identified as Unit 48A, comprised of fourteen (14) coldbox machines, Unit 47 A, **and** fourteen (14) cold box mixers **with** each combination of coldbox core making machine and coldbox sand mixer **with having** a capacity of 5.06 tons of cores per hour and a maximum tea usage of 7.13 pounds per hour and maximum resin usage of 7.59 pounds per hour, and Unit 49A, OV1-8339 crank case oven rated at 13.5 MM Btu/hr, and unit 50A, OV2-8322 water jacket and valley core dry oven rated at 12 MM Btu/hr, **(neither of which are considered to be steam generating units under 40 CFR Subpart D, Da, Db, or Dc)**, with a combined System 1

& 2 sand core production rate of 298, 840 tons of cores per 12 consecutive month period which is equivalent to ~~6.9~~ **34** tons of cores per hour, using:

- (A) an acid scrubber, identified as CE-8180W, installed in 1998, as TEA (triethylamine) ~~and VOC~~ control, and exhausting to stack S-8180W.
- (B) sand transfer belt within System #1, installed in 1998, having a combined capacity of 36 tons of sand per hour, using two (2) cartridge filter baghouses, CE-1581 and CE-1582, as PM control, exhausting to stacks S-1581 and S-1582.

Comment 7:

Section A.2(e) (5), and Section D.5 (e), Core Room East: Comments contained in Comment 6 for Core Room West Line are also applicable to Core Room East Line. Testing requirements for VOC should also be removed for both Core Room Scrubbers.

Response 7:

The same response as in Response 6 apply to the Core Room East. However, testing is still required for VOC because a VOC limit is still in place. Section A.2 (e) (5), and Section D.5 (e) Facility Description, describing the Core Room East Line have been changed as follows:

Core Room East/Line B/System #2 core making line, identified as Unit 48B, installed in 1998, comprised of fifteen (15) coldbox machines, Unit 47 B, **and** fifteen (15) cold box mixers, each combination of coldbox core making machine and coldbox sand mixer with a maximum capacity of 5.06 tons of cores per hour and a maximum tea usage of 7.13 pounds per hour and maximum resin usage of 7.59 pounds per hour, and Unit 49B, OV1-8440 crank case oven rated at 13.5 MM Btu/hr, and unit 50B, OV2-8322 water jacket and valley core dry oven rated at 12 MM Btu/hr **(neither of which are considered to be steam generating units respective to the New Source Performance Standards)**, with a combined System 1 & 2 sand core production rate of 298, 840 tons of cores per 12 consecutive month period which is equivalent to ~~6.9~~ **34** tons of cores per hour, using:

- (a) an acid scrubber, identified as CE-8280E, installed in 1998, as TEA (triethylamine) and VOC control, and exhausting to stack S-8280E.
- (b) sand transfer belt within System #1, installed in 1998, having a combined capacity of 36 tons of sand per hour, using two (2) cartridge filter baghouses, CE-1583 and CE-1584, as PM control, exhausting to stacks S-1583 and S-1584.

As a result of this comment, Section D.5.11 has also been changed as follows:

D.5.11 VOC and TEA

Pursuant to 326 IAC 8-1-6, and in order to comply with D.5.3 and D.5.4, the acid scrubbers, CE-8180W and CE-8280E for ~~VOC~~ and TEA control shall be in operation and control emissions from the Core Room West and the Core Room East, respectively, at all times that these units are in operation. A continuous flow meter and pH meter shall be calibrated, maintained, and operated for the TEA scrubbers.

Comment 8:

Section A.2(e) (6), and Section D.5 (f), Core Room: Daimler Chrysler has determined that the appropriate descriptions for the boilers are 1East and 2West with stacks S-1East and S-2West, respectively.

Response 8:

Section A.2 (e) (6), and Section D.5 (f) Facility Description, describing the Core Room boilers have been changed as follows:

- (f) Two (2) natural gas fired boilers, identified ~~collectively~~ as Units ~~TBD~~ **1East and 2West**, installed in 1998, each with a maximum capacity of ten (10) million Btu per hour (MMBtu/hr), exhausting to stacks ~~S-TBD~~ **S-1 East and S-2 West, respectively**.

Sections D.5.5, D.5.6, and D.5.7 have also been changed to reflect the modified boiler descriptions as follows:

D.5.5 Particulate Matter (PM) [326 IAC 6-1-2]

Pursuant to 326 IAC 6-1-2, particulate matter emissions from the Core Room, Units 41, 42, 43, 44, 45, 46, 47A, 47B, 48A, 48B, 50A, 50B ~~and TBD~~, **1East, and 2West** shall each be limited to particulate matter emissions of no greater than seven-hundredths (0.07) g/DCM (three-hundredths (0.03) grain/dscf).

D.5.6 Particulate Emissions Limitations for Sources of Indirect Heating [326 IAC 6-2-4]

Particulate emissions from indirect heating facilities shall be limited by the following equation:

$$Pt = 1.09/Q^{0.16} = 1.09/20^{0.16} = 0.67$$

where Pt = Pounds of particulate matter emitted per million Btu (lb/MMBtu) heat input.

Q = Total source maximum operating capacity rating in million Btu per hour (MMBtu/hr) heat input.

Therefore, particulate emissions from the natural gas fired boilers, identified as ~~TBD~~ **1East and 2West**, shall not exceed 0.67 pounds per million Btu (lbs/MMBtu).

D.5.7 Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units [326 IAC 12, 40 CFR 60, Subpart Dc]

Pursuant to the New Source Performance Standard, 326 IAC 12, 40 CFR 60, Subpart Dc:

- (a) Daily natural gas consumption for each of the natural gas fired boilers, identified ~~collectively~~ as ~~TBD~~ **1East and 2West**, with maximum capacities of 10 million Btu per hour (MMBtu/hr) shall be recorded as per 40 CFR Part 60 Subpart Dc. Records shall be retained for a period of at least five (5) years from the date of the generation of the measurement or record.
- (b) Pursuant to 40 CFR 60 §60.48c(a), the owner or operator of this source shall submit notification of the date of construction or reconstruction, anticipated startup, and actual startup, as provided by §60.7 of this rule.

The Part 70 Quarterly Report has also been changed to reflect the modified boiler descriptions as follows:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
and
INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES
AIR QUALITY MANAGEMENT SECTION
DATA COMPLIANCE**

Part 70 Quarterly Report

Source Name: Daimler Chrysler Corporation - Indianapolis Foundry
Source Address: 1100 South Tibbs Avenue, Indianapolis, Indiana 46241
Mailing Address: 1100 South Tibbs Avenue, Indianapolis, Indiana 46241
Part 70 Permit No.: T097-6485-00012
Facility: Core Room (Units 41, 42, 43, 44, 45, 46, 47A, 47B, 48A, 48B, 50A, 50B,
TBD 1East, and 2West)
Parameter: Core Production
Limit: 298,840 tons of cores per 12 consecutive month period

Comment 9:

Section A.3 (a), Specifically Regulated Insignificant Activities: The boilers described in A.3 (a) are the same units described in A.2 (e) (6), discussed in Comment 8. Therefore, they should be identified accordingly.

Response 9:

The Core Room boilers only need to be listed once in Section A. Therefore, the description of the boilers under Section A.3, Specifically Regulated Insignificant Activities has been removed as follows:

~~(a) Internal Combustion natural gas fired sources that include two (2) boilers, serving the Core Room, identified as Units TBD, installed in 1998, each with a maximum capacity of seven (7) ten (10) MM Btu/hr each, exhausting to stack S-TBD.~~

Comment 10:

(a): Condition D.1.3, Carbon Monoxide Limitation: Daimler Chrysler requests that the carbon monoxide (CO) limitation, including the melt rate limit, be removed because there is no short term CO emission limitation in the existing Construction Permit nor is the hourly melt rate relevant to proper control of CO emissions.

(b): Condition D.1.3, Carbon Monoxide Limitation: Daimler Chrysler also states that the oxidizer can only operate at temperature during normal melting operations and not during startup and shutdown.

(c): Condition D.1.3, Carbon Monoxide Limitation: Daimler Chrysler also requests that the retention time specification be removed as 326 IAC 9-1-2 only requires operation of a combustion device, not a specific retention time.

Response 10:

(a): As discussed on page 9 of the TSD, the cupola melt system, which was originally permitted by Construction Permit 0970012-04, issued November 20, 1997, at 75 tons of melted metal per hour, has been derated to the rate at which compliance has been demonstrated through stack testing. The stack tests have shown compliance at a capacity of 66.6 tons per hour, the source is required to test at 95 % of the maximum capacity, so the source requests that the maximum capacity be revised to $1.05 * 66.6 = 69.9$ tons of melted metal per hour. The melt rate is necessary to determine CO emissions, and will therefore remain as a limit in the permit.

(b) and (c): Condition D.1.3 has been combined with Condition D.1.15, and changed as follows:

D.1.3 Carbon Monoxide Limitation [326 IAC 9-1-2] [CP-0970012-04]

Pursuant to **CP-0970012-04, issued on November 29, 1997, and** 326 IAC 9-1-2, the emission of carbon monoxide from the grey iron cupola, identified as emission unit 1N, shall be controlled by a direct flame afterburner ~~that maintains a minimum temperature of one thousand three hundred (1,300) degrees Fahrenheit for a minimum retention time of three-tenths (0.3) second.~~ The melt rate shall not exceed 69.9 tons per hour. **The afterburner, CE-4N, for VOC and CO control shall be in operation and control emissions from the cupola at all times the cupola is in operation. When operating the afterburner shall maintain a minimum average hourly operating temperature of 1372°F. This minimum temperature requirement applies at all times during afterburner operation, except for the following:**

- (1) **periods when the afterburner is turned off;**
- (2) **periods of startup; and**
- (3) **periods of shutdown.**

~~D.1.15 Afterburner [CP-0970012-04][326 IAC 9-1-2]~~

~~Pursuant to CP-0970012-04, issued on November 20, 1997, the afterburner, CE-4N, for VOC and CO control shall be in operation and control emissions from the cupola, 1N, at all times that the cupola is in operation. When operating, the afterburner shall maintain a minimum average hourly operating temperature of 1372°F or the average hourly temperature determined during the most recent compliant stack test, as approved by IDEM.~~

Comment 11:

Condition D.1.4, VOC Limitation: As indicated in Construction Permit 0970012-04, Operation Condition 13, the annual allowable emissions from the cupola are 94 tons per year based upon 0.47 pounds VOC per ton and 400,000 tons per year. The value of 2.44 tons per year as currently stated in the draft Title V permit should therefore be corrected to read 94 tons.

Response 11:

Construction Permit 0970012-04, Operation Condition 13, does state that the annual allowable emissions from the cupola are 94 tons per year based upon 0.47 pounds VOC per ton and 400,000 tons per year. In addition Construction Permit 0970012-04, Operation Condition 15, states that the afterburner must be in operation at all times when material handling and metal melting processes are in operation. As stated in the TSD, page 20, and in Condition D.1.15, the afterburner shall maintain a minimum average hourly operating temperature of 1372°F or the average hourly temperature determined during the most recent compliant stack test, as approved by IDEM, OAQ. This average hourly temperature of 1372°F correlates to an overall CO control efficiency of at least 97.4% based on stack capture and destruction efficiency test conducted on February 20, 2002. Compliance with this average hourly temperature requirement satisfies the afterburner temperature requirement under 326 IAC 9-1-2. The value of 2.44 tons per year as stated in the draft Title V permit is reflective of this required 97.4% efficiency control. This value is used to avoid confusion over 326 IAC 8-1-6 BACT compliance. A review of the RACT BACT LAER Clearinghouse (RBLC) revealed that a standard control device for a cupola is a recuperative incinerator. The equivalent control efficiency of which is typically 88.9%. Because a control efficiency of 97.4% is required for the afterburner by CP 0970012-04 and Condition D.1.14. Therefore, the afterburner satisfies the BACT requirement. The 326 IAC 8-1-6 BACT requirement is not being avoided by the production limit because the potential to emit before control is greater than 25 tons per year of VOC. Condition D.1.4 has been changed for clarification as follows:

D.1.4 VOC Limitation [326 IAC 2-2][CP 0970012-04][326 IAC 9-1-2][326 IAC 8-1-6]

Pursuant to CP 0970012-04 **and 326 IAC 8-1-6 (BACT)**, issued on November 20, 1997, in order that the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) ~~and 326 IAC 8-1-6~~

~~(BACT)~~ do not apply to the Cupola Melt System, metal production shall not exceed 400,000 tons per consecutive twelve (12) month period with compliance determined at the end of each month, from Cupola Melt System, comprised of emission units identified as 1N, 2N, and 3N. VOC emissions shall not exceed ~~0.47~~ **0.012** pound of VOC per ton of metal produced. **This is equivalent to 2.44 tons of VOC per twelve (12) consecutive month period.**

Comment 12:

Condition D.1.5, PM-10 and PM Limitations: PM-10 is the only particulate related pollutant that is limited by the Cupola construction permit, CP 0970012-04, to avoid PSD applicability. Therefore, the condition related to PM is unnecessary and should be eliminated from the draft Part 10 permit.

Response 12:

Condition 12 of CP 0970012-04 states, "For the purposes of this permit, PM10 emissions are equivalent to PM emissions, therefore the limits above satisfy the requirements of 326 IAC 6-1-2 for Emission Units 2N and 3N and the requirements of 326 IAC 6-1-12 for Emission Unit 1N." Therefore, the condition for PM is necessary to preserve this line of reasoning in the original construction permit. Condition D.1.5 has been changed as follows to reflect this original line of reasoning:

D.1.5 PM-10 Limitations [326 IAC 2-2][CP 0970012-04]

- (a) Pursuant to CP 0970012-04, issued on November 20, 1997, in order that the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) do not apply to the Cupola Melt System (Emissions Units 1N, 2N, and 3N), the emission of **particulate matter (PM)** and particulate matter less than 10 microns in size (PM10) shall be limited as follows (Table 1):

Table 1

Emission Unit ID	Description	PM/PM10	
		lb/ton	ton/year
1N	Cupola	0.112	22.4
2N	Electric Induction Holding Furnace	0.100	19.9
3N	Coke and Limestone Material	0.108	21.6
		<u>Total:</u>	<u>63.9</u>

- ~~(b) In order that the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) do not apply to the Cupola Melt System (Emissions Units 1N, 2N, and 3N), the emission of particulate matter (PM) shall be limited as follows (Table 2):~~

Table 2

Emission Unit ID	Description	PM	
		lb/ton	ton/year
1N	Cupola	0.7	140
2N	Electric Induction Holding Furnace	0.2	40
3N	Coke and Limestone Material	0.108	21.6

Total: 201.6

Comment 13:

Conditions D.1.6, D.1.9, and D.1.10, SO₂, CO, and NO_x Limitations: The criteria pollutants, SO₂, CO, and NO_x, were addressed in the netting analysis included in CP 0970012-04, issued on November 20, 1997. The netting analysis was based upon a production limit of 400,000 tons of metal melted per rolling twelve month period and, for CO, the operation of a combustor. The netting analysis demonstrated that none of the criteria pollutants would experience a net significant increase and therefore, PSD did not apply. There are already other federally enforceable operational limitations which are the driving forces to avoid PSD and therefore new emission limitation do not need to be created to ensure that PSD does not apply. Daimler Chrysler requests that Conditions D.1.6, D.1.9, and D.1.10 be removed from the permit.

Response 13:

The production limit of 400,000 tons of metal melted per twelve consecutive month period was established in CP 0970012-04 to avoid PSD. Including the effects of emissions on criteria pollutants, including SO₂, CO, and NO_x, does not create any new emission limitations. While the netting analysis did demonstrate that none of the criteria pollutants would experience a net significant increase, it was based on this production limit and an assumption regarding short-term emission levels of SO₂, CO, and NO_x. The netting analysis is also discussed in the TSD. Potential to emit must be limited to render PSD not applicable. Potential to emit consists of a short term emission limit combined with an annual production limit. Conditions D.1.6, D.1.9 have not been changed or omitted. However, D.1.10 has been changed to accurately reflect the NO_x emission limit and to be consistent with CP 0970012-04:

D.1.10 Nitrous Oxides (NO_x) Limitation [326 IAC 2-2]

In order that the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) do not apply to the Cupola Melt System (Emissions Units 1N, 2N, and 3N), the emission of nitrous oxides (NO_x) shall be limited as follows (Table 6):

Table 6

Emission Unit ID	Description	NO _x	
		lb/ton	ton/year
1N	Cupola	7.3 0.16	32.0
2N	Electric Induction Holding Furnace	0	0
3N	Coke and Limestone Material	0	0
		<u>Total:</u>	-266.6 32.0

Comment 14:

Condition D.1.11, Beryllium Limitation: This beryllium limitation was not included in the construction permit issued for the Cupola Melt System as there was no need to address beryllium. There is no need to limit beryllium emissions and this condition, including its associated table, should not be included in the permit.

Response 14:

Cupolas do emit small amounts of beryllium, which is a PSD regulated pollutant. Therefore, a limit on the potential to emit of beryllium is necessary. However, D.1.11 has been changed so that the total beryllium emission limitation is consistent with the table as follows:

D.1.11 Beryllium Limitation [326 IAC 2-2]

In order that the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) do not apply to the Cupola Melt System (Emissions Units 1N, 2N, and 3N), the emission of beryllium shall be limited as follows (Table 6):

Table 6

Emission Unit ID	Description	Beryllium	
		lb/ton	ton/year
1N	Cupola	0.000002	0.0004 0.00039
2N	Electric Induction Holding Furnace	0	0
3N	Coke and Limestone Material	0	0
		Total:	266.6 0.00039

Comment 15:

Condition D.1.12, Cupola Melt System: This condition was not included in the construction permit issued for the cupola, CP 0970012-04. There is no underlying regulation that requires daily records of throughput and hours of operation. The facility currently maintains a record of the tons of metal melted per day. Because production does not fluctuate substantially, more frequent recordkeeping is not necessary. Daimler Chrysler requests that this condition be removed.

Response 15:

As stated on page 9 of the TSD, the cupola melt system, which was originally permitted by Construction Permit 0970012-04, issued November 20, 1997, at 75 tons of melted metal per hour, has been derated to the rate at which compliance has been demonstrated through stack testing. The stack tests have shown compliance at a capacity of 66.6 tons per hour. The source is required to test at 95 % of the maximum capacity, so the source requests that the maximum capacity be revised to $1.05 * 66.6 = 69.9$ tons of melted metal per hour. Other maximum capacities have also been revised in direct proportion to the amount of metal melted in the cupola. Therefore, this requirement is necessary. Monitoring and record keeping are necessary to certify compliance with the capacity limit. As the facility does currently maintain records of the tons of metal melted per day, the only additional record necessary for this requirement is the hours of operation. However, the intention of this condition was not to require record keeping for the twenty-four hour average at each hour. The intention was to do so once per twenty-four hour period. The condition has been clarified as follows to reflect such intent:

D.1.12 Cupola Melt System [CP 0970012-04]

Pursuant to Construction Permit 0970012-04, the Units 1N and 2N shall not exceed a rate of 69.9 tons of metal per hour. The permittee shall record the average throughput ~~over each~~ **once per** twenty-four hour period and the hours of operation for that twenty-four hour period.

Comment 16:

Conditions D.1.13, D.2.6, D.3.3, D.4.3, and D.5.8, Preventive Maintenance Plan: Section B indicates that Preventive Maintenance Plans (PMPs) apply to control devices, not process equipment. Therefore, the reference to facilities should be removed.

Response 16:

The Preventive Maintenance Plan requirement must be included in every applicable Title V permit pursuant to 326 IAC 2-7-5(13). This rule refers back to the Preventive Maintenance Plan requirement as described in 326 IAC 1-6-3. This Preventive Maintenance Plan rule sets out the requirements for:

- (a) Identification of the individuals responsible for inspecting, maintaining and repairing the emission control equipment (326 IAC 1-6-3(a)(1)),
- (b) The description of the items or conditions in the facility that will be inspected and the inspection schedule for said items or conditions (326 IAC 1-6-3(a)(2)), and
- (c) The identification and quantification of the replacement parts for the facility which the Permittee will maintain in inventory for quick replacement (326 IAC 1-6-3(a)(2)).

It is clear from the structure of the wording in 326 IAC 1-6-3 that the PMP requirement affects the entirety of the applicable facilities. Only 326 IAC 1-6-3(a)(1) is limited, in that it requires identification of the personnel in charge of only the emission control equipment, and not any other facility equipment. 326 IAC 1-6-3(b) provides that, “. . . as deemed necessary by the commissioner, any person operating a facility shall comply with the requirements of subsection (a) of this section.”

Many types of facilities require maintenance in order to prevent excess emissions. Therefore, Conditions D.1.13, D.2.6, D.3.3, D.4.3, and D.5.8 have not been changed.

Comment 17:

Conditions D.1.14, Testing Requirements:

- (a) Due to the extensive testing and therefore scheduling complexities, Daimler Chrysler is requesting that initial testing be required within 36 months of permit issuance. Daimler Chrysler also requests that conditions D.2.7, D.3.4, D.4.4, D.5.9, and D.6.4 be changed to require initial testing within 36 months of permit issuance.
- (b) The testing conditions for the cupola and the core room require that testing be repeated every two and one-half (2½) years rather than the standard five (5) year requirement based upon the permit term. Daimler Chrysler is requesting that all testing be required on a five year permit term cycle. Daimler Chrysler also requests that all testing required in Conditions D.2.7, D.4.4, and D.5.9 for the sand handling system, the cleaning department, and core room scrubbers, respectively, be repeated every five (5) years, rather than two and one-half (2½).
- (c) Daimler Chrysler requests that the statement “PM-10 includes filterable and condensable PM-10” be removed from the permit since the Compliance Data Section will determine the specific stack test requirements. Daimler Chrysler is concerned that the statement may be interpreted as meaning that the permittee is required to utilize specific USEPA reference test methods even though for a particular process the Compliance Data Section may determine otherwise. Removing the statement does not change the definition of PM-10 nor does it change or constrain the testing methods that may be required by the Compliance Data Section. Daimler Chrysler also requests that this statement be removed from D.2.7, D.4.4, and D.6.4.

Response 17:

- (a) For the cupola, the holding furnace, and the coke/limestone area, IDEM, OAQ and OES consider the 180 day period sufficient time for initial testing. Some of the pollutants, like beryllium and SO₂ have never previously been tested. The most recent stack test was in June of 2002. 180 days after the issuance of this permit will be about 2½ years since the most recent stack test. IDEM, OAQ and OES have determined that a time frame longer than 180 days would not be sufficient to ensure compliance. No changes have been made to D.1.14 as a result of this comment.

Condition D.2.7 allows between 36 and 60 months after issuance to conduct testing. If Daimler Chrysler prefers to test before 36 months, IDEM, OAQ and OES will have no objections. Condition D.2.7 has been changed as follows:

D.2.7 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

- (a) ~~During the period between~~ **Within 36 and 60 months** after issuance of this Part 70 permit, in order to demonstrate compliance with Conditions D.2.3 and D.2.4, the Permittee shall perform PM and PM-10 testing on the sand handling system, identified as Emission unit 4, 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. PM-10 includes filterable and condensable PM-10. Testing shall be conducted in accordance with Section C- Performance Testing.

Condition D.3.4 requires initial testing between January 2007 and June 2007. Because this period will be within 36 months after issuance of the permit, Condition D.3.4 has been changed as follows:

D.3.4 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

- ~~During the period between January 2007 and June 2007,~~ **Within 36 months after issuance of this Part 70 Permit,** in order to demonstrate compliance with Condition D.3.1 and D.3.2, the Permittee shall perform PM and PM-10 testing on each of the shakers 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. PM-10 includes filterable and condensable PM-10. Testing shall be conducted in accordance with Section C- Performance Testing.

For all other emission units listed, IDEM, OAQ, and OES consider the proposed time frames sufficient time for initial testing. For the Cleaning Department, compliance has not been established since April, 2000. For the Core Room Scrubbers, Daimler Chrysler has never established compliance for VOC on the scrubbers, and Daimler Chrysler has only established compliance for TEA on one scrubber in February 2002. Daimler Chrysler has never established compliance for the Refuse Bunker Area. IDEM, OAQ, and OES have determined that a time frames longer than those proposed would not be sufficient to ensure compliance for these emission units. No changes have been made to Conditions D.4.4, D.5.9, or D.6.4 as a result of this comment.

- (b) IDEM, OAQ and OES consider 2½ year the appropriate time to repeat testing for the cupola and core room. For a grey iron foundry that is a major source of pollutants, IDEM, OAQ and OES do not believe that testing every five years would be adequate to ensure compliance. No changes have been made as a result of this comment.
- (c) The statement that "PM-10 includes filterable and condensable PM-10" is included to clarify the meaning of PM-10. Condition D.1.14 does not specify a specific testing method, allowing the permittee flexibility. However, the requirement to test for PM-10 does require testing for filterable and condensable PM-10. IDEM, OAQ and OES believe that the statement should remain for

clarification. No changes have been made as a result of this comment.

Comment 18:

Condition D.1.16, Particulate Matter (PM): Daimler Chrysler requests that the baghouse, referred to as CE-1N, be corrected to baghouses 2720E and 2720W, and that the baghouse, referred to as CE-2N, be corrected to baghouse CE-1530.

Response 18:

Condition D.1.16 has been changed as follows:

D.1.16 Particulate Matter (PM)

Pursuant to 326 IAC 6-1-2 and CP-0970012-04, issued on November 20, 1997, and in order to comply with D.1.5 and D.1.7,

- (a) the baghouses, ~~CE-1N~~ **2720E and 2720W**, for PM control shall be in operation and control emissions from the cupola, 1N, at all times that the cupola is in operation; and
- (b) the baghouse, ~~CE-2N~~ **CE-1530**, for PM control shall be in operation and control emissions from the electric induction holding furnaces, 2N, at all times that the electric induction holding furnaces are in operation.

Comment 19:

Conditions D.1.18, Parametric Monitoring for the Baghouses:

- (a) Pressure drop ranges are specified in various terms and conditions of the draft Part 70 permit related to the operation of pollution control equipment. The alternative to the range specified in the Part 70 permit is "a range established during the latest stack test." While certain parameters can be set reasonably close to a desired value during a stack test, pressure drop readings are not typically a value that can be specifically controlled during a stack test and Daimler Chrysler does not believe the pressure drop is the best indicator of proper operation of control equipment. Therefore, Daimler Chrysler has requested that the draft permit be modified with the statement "or as specified in the Compliance Response Plan" which is consistent with the existing construction permit, to indicate that the appropriate pressure drop can also be specified in the Compliance Response Plan required for a control device. This avoids the need to modify the Part 70 permit and avoids the situation where the permittee operates the control device properly, but is slightly outside the range specified in the permit, which could be construed as a deviation from the permit condition. Daimler Chrysler requests that this change also be made to Conditions D.2.10, D.3.7, D.4.7, D.5.13, and D.6.7.
- (b) Daimler Chrysler requests that pressure drop readings be required on a daily rather than per shift frequency. Daimler Chrysler requests that this change also be made to Conditions D.2.10, D.3.7, D.4.7, D.5.13, and D.6.7.

Response 19:

- (a) The phrase "a range established during the latest stack test" is included to provide more flexibility to the source. The source may use a different pressure drop range if they demonstrate compliance through stack testing. The statement "or as specified in the Compliance Response Plan" can not be included. The pressure drop range must be in the permit to prevent the range from being so wide as to make pressure drop monitoring useless. The Compliance Response

Plan may indicate that no response action is necessary under certain circumstances. One example would be a low reading soon after re-bagging. The Compliance Response Plan may state that no response step is necessary as long as pressure drop returns to normal within a specified number of operating hours. No changes have been made as a result of this comment.

- (b) The monitoring of the pressure drop of the baghouses provides an indication of whether the control device is operating properly. Monitoring of the static pressure drop can alert the operator to relative changes (such as dust cake resistance or bag failure) over a period of time. The operator can use this information to chart trends and determine if the unit is operating within the optimal range as determined by baseline testing of the unit and manufacturer's specifications. Pressure drop is an indicator of a variety of conditions within the baghouse. Any deviations from the normal operational range of the unit, whether gradual or sudden, should alert the operator that the unit needs maintenance. Both gradual and sudden changes in the pressure drop could result in damage to the bags if not properly addressed. Further, while the nature of a facility's operation may not vary from shift to shift, the personnel at the facility does change from shift to shift. IDEM, OAQ and OES believe that all shifts should be in tune with the work practices necessary to ensure continual compliance with permit requirements. These work practices should include an understanding and awareness of proper operating parameters of the control equipment. This knowledge and awareness during all shifts can minimize lag time in addressing control failure. Therefore, IDEM, OAQ and OES believe that pressure drop readings should be taken at least once per shift. The requirements to measure the pressure drops across the baghouses will not be deleted from the permit.

Comment 20:

Condition D.1.21, Parametric Monitoring for the Afterburner:

- (a) As indicated in Condition D.1.15, changes in the required operating temperature should be allowed based upon the results of IDEM, OAQ approved stack tests. Therefore, Daimler Chrysler requests that the specific temperature requirement be removed or that the requirement allow for an operating temperature based on stack testing.
- (b) EPA defines continuous as at least once every 15 minutes. Therefore, Daimler Chrysler requests that the EPA definition of continuous be utilized.

Response 20:

- (a) Condition D.1.21 refers to the time frame from the date of issuance of the permit until the approved stack test results are available when it includes the specific temperature requirement. After the approved stack test results are available the value established during the test may certainly be used. Condition D.1.21 has been changed as follows:

D.1.21 Parametric Monitoring for the Afterburner

- (a) A continuous monitoring system shall be calibrated, maintained, and operated on the cupola for measuring temperature of the cupola gas stream. For the purposes of this condition, continuous shall mean no less than once per minute. The output of this system shall be recorded as an hourly average. From the date of issuance of this permit until the approved stack test results are available, the Permittee shall take appropriate response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports whenever the hourly average temperature of the cupola gas stream is below 1372 °F. **Once the approved stack test results are available, the Permittee shall take appropriate response steps in**

accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports whenever the hourly average temperature of the cupola gas stream is below the average hourly temperature determined during the most recent compliant stack test, as approved by IDEM. This minimum temperature requirement applies at all times during cupola operation, except for the following:

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

An hourly average temperature that is below 1372 °F is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports shall be considered a deviation from this permit.

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

- (b) The afterburner temperature is critical for the effectiveness of the control of VOC and CO by the afterburner. For this condition, IDEM, OAQ and OES believe that once per minute is the most appropriate frequency of monitoring. Therefore, no change has been made to Condition D.1.21 as a result of this comment.

Comment 21:

Condition D.1.24(a), Record Keeping Requirements: Similar to Condition D.1.12, this condition should be deleted.

Response 21:

As D.1.12 was not removed, D.1.24(a) is necessary to document compliance with D.1.12. Again, the intention of this condition was not to require record keeping for the twenty-four hour average at each hour. The intention was to do so once per twenty-four hour period. The condition has been clarified as follows to reflect such intent:

D.1.24 Record Keeping Requirements

- (a) To document compliance with Condition D.1.12, the Permittee shall maintain records of the average throughput ~~over each~~ **once per** twenty-four hour period and the hours of operation for each twenty-four hour period for Units 1N and 2N.

Comment 22:

Condition D.1.24 (b) and (c), Record keeping Requirements: Daimler Chrysler requests that the frequencies be removed from the record keeping requirements to eliminate redundant language. Daimler Chrysler also requests that the frequencies be removed from the record keeping requirements included in D.2.17 (a) and (b), D.3.10 (a) and (b), D.4.10 (b), and D.5.21 (b), (c), and (e).

Response 22:

IDEM, OAQ and OES prefer that the frequencies remain in the record keeping requirements for clarity. The purpose of the frequency in the record keeping requirement is to ensure that observations are written as they are observed, rather than at a later time. No changes have been made as a result of this

comment.

Comment 23:

Condition D.2.1, VOC Emissions: Daimler Chrysler is not aware of any compliance issues related to the permitting installation of the IML and requests that this condition be removed.

OES and IDEM, OAQ have proposed new emissions limitations, operating restriction and/or production limitations based on the applicability of the requirements of the Prevention of Significant Deterioration (PSD) pre-construction permitting program set forth in 40 CFR 52.21 and 326 IAC 2-2, to specific emission units and/or manufacturing operations at the IFP. However, DCC has not requested approval from OES or IDEM, OAQ to undertake any physical or operational changes at the IFP that would be subject to the PSD pre-construction permitting requirements. Instead, in administrative process for issuance of a final Part 70 Operating Permit OES and IDEM, OAQ attempt to apply retroactively the PSD preconstruction permitting requirements to projects undertaken by DCC at the IFP many years ago. Those projects were undertaken by DCC only after submittal of the required permit applications to OES and/or IDEM, OAQ and only after issuance by OES and/or IDEM, OAQ (or the predecessor permitting authority), of a valid Construction Permit or approval for each specific project. OES and IDEM, OAQ have no legal authority to retroactively apply the PSD preconstruction permitting requirements through the Part 70 Operating Permit process.

Response 23:

The Impact Mold Line includes the following facilities which have VOC emissions in excess of 40 tons per year and have not been reviewed for PSD:

- (1) One (1) Punch-up/Push-off process, identified as Unit 26, installed in 1987; and
- (2) One (1) pouring/cooling line, identified as Units 5a and 5b, installed in 1988; and
- (3) One (1) Sand Handling System, identified as Unit 4, installed in 1988; and
- (4) One (1) Oscillating Shakeout Conveyor, identified as Unit 28, installed in 1989.

Therefore, IDEM, OAQ and OES consider this an enforcement issue. This issue will be addressed upon the prompt reopening of this permit. No changes have been made as a result of this comment.

Comment 24:

Condition D.2.4, Particulate Matter: PM-10 was not a regulated pollutant in 1987 when the IML was permitted and therefore, any references to PM-10 should be eliminated.

Response 24:

PM-10 became a regulated pollutant on July 31, 1987. Permit Number 870012-3 was issued on December 31, 1987. Therefore, PM-10 was a regulated pollutant when the IML was permitted and references to PM-10 shall remain.

Comment 25:

Conditions D.2.7, Testing Requirements: PM-10 was not a regulated pollutant in 1987 when the IML was permitted and therefore, any references to PM-10 should be eliminated.

Response 25:

PM-10 became a regulated pollutant on July 31, 1987. Permit Number 870012-3 was issued on December 31, 1987. Therefore, PM-10 was a regulated pollutant when the IML was permitted and references to PM-10 shall remain.

Comment 26:

Condition D.2.8, Particulate Matter: The Agreed Judgement referenced in the permit condition is not the Agreed Judgement to which the baghouse designated CE-1504 was installed. It was actually a different Agreed Judgement No. 49F1299611OV11272, dated April 24, 1997. Given that the baghouse was installed in accordance with the April 1997 Agreed Judgement, compliance with the terms of that Agreed Judgement have been fully satisfied and as a result, it has no further legal force and effect. In July 2002, Daimler Chrysler submitted a request to OES to incorporate the subject control equipment into an existing Construction Permit No. CP-910012-02. Although that permit modification was never completed by OES, the requirement to continue operating baghouse designated CE-1504 can be incorporated into the Part 70 Operating Permit. However, it is not appropriate to reference the Agreed Judgement as imposing any continuing obligation; that can be accomplished through issuance of the Part 70 Permit.

Response 26:

D.2.8 Particulate Matter (PM) [~~Agreed Judgement 49F1294120V4977~~]

- (a) Pursuant to ~~Agreed Judgement 49F1294120V4977~~, dated January 29, 1996, the baghouse, CE-1504, for PM control shall be in operation and control emissions from the Sand Screening/Bleed off, Unit 404, at all time the Sand Screening/Bleed off is in operation.
- (b) In order to comply with D.2.4, at all times the pouring/cooling line is in operation, the baghouse CE-1502 shall be in operation and controlling emissions from the pouring/cooling line.
- (c) In order to comply with D.2.4, at all times the Oscillating Shakeout Conveyor is in operation, the baghouses CE1503 N, M, S, and CE1595 shall be in operation and controlling emissions from the Oscillating Shakeout Conveyor.
- (d) In order to comply with D.2.4, at all times the Sand Handling System is in operation, the baghouses CE1501E and CE1501W shall be in operation and controlling emissions from the Sand Handling System.

Comment 27:

Condition D.2.9(a), Visible Emissions Notations: Daimler Chrysler requests that visible emissions notations be required on a daily basis as opposed to once per shift. Daimler Chrysler also requests that this change be made to D.3.6(a), D.4.6(a), D.5.12(a), and D.6.6(a).

Response 27:

Compliance monitoring conditions are in the permit in order to ensure continuous compliance with the requirements. The suggested frequency would allow sporadic use of compliance monitoring, which would not accomplish the purpose of compliance monitoring. Baghouse failure can occur suddenly; therefore monitoring of baghouse operational parameters should be more frequently than daily in such cases where a source operates more than one shift per day. OES and IDEM, OAQ believe that visible

emissions notations once per operating shift are a reasonable requirement. Therefore, no changes have been made as result of this comment.

Comment 28:

Conditions D.3.10(a) and (d), Record Keeping Requirements: Daimler Chrysler requests that D.3.10(d) be changed as follows:

- (d)(2) ~~Actual~~ Amount (in tons) of metal processed in Unit 44 **shall be determined based upon the amount of metal poured from the cupola.**

Response 28:

The actual amount of metal processed in Unit 44 may be satisfied based upon the amount of metal poured from the cupola. However, there is no need to remove the word "actual," because this should be the actual amount of metal processed. Condition D.3.10 has been changed as follows:

D.3.10 Record Keeping Requirements

- (a) To document compliance with Condition D.3.6, the Permittee shall maintain records of once per shift visible emission notations of the shakers stack exhausts.
- (b) To document compliance with Condition D.3.7, the Permittee shall maintain records of the total static pressure drop across the baghouses used in conjunction with the shakers, Unit 44.
- (c) To document compliance with Condition D.3.8, the Permittee shall maintain records of the results of the inspections required under Condition D.3.8.
- (d) To document compliance with Condition D.3.2, the Permittee shall maintain the following:
- (1) Calendar dates covered in the compliance determination period.
- (1) Actual amount (in tons) of metal processed in Unit 44. **This may be determined based upon the amount of metal poured from the cupola.**
- (e) To document compliance with Condition D.3.3, the Permittee shall maintain of records of any additional inspections prescribed by the Preventive Maintenance Plan.
- (f) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

Comment 29:

Condition D.4.1(a), Particulate Matter: The year, 1998, should be added to clarify the issuance date of the subject construction permit.

Response 29:

Condition D.4.1(a) has been changed as follows:

D.4.1 Particulate Matter (PM) [326 IAC 2-2][326 IAC 6-1-2][CP 0980012-01][CP 880012-5]

- (a) Pursuant to 326 IAC 6-1-2 and CP 0980012-01, issued on February 24, **1998**, particulate matter emissions from the finishing line A/System #1, Unit 32, and finishing line B/System

2, Unit 33 shall each be limited to particulate matter emissions of no greater than seven-hundredths (0.07) g/DCM (three-hundredths (0.03) grain /dscf).

Comment 30:

Condition D.4.1(b), Particulate Matter: As indicated in Construction Permit 0880012-5, operation Condition 12, the annual allowable emissions from the process are 85.0 tons per year based upon 0.433 pounds PM per ton and 400,000 tons per year. The value of 38.3 tons should be corrected to read 85.0 tons (eighty five).

Response 30:

Pursuant to 326 IAC 6-1-2(a), particulate matter emissions from facilities not limited by subsections (b), (e), (f), or (g) of 326 IAC 6-1-2 shall not exceed seven-hundredths (0.07) gram per dry standard cubic meter (g/dscm) (three-hundredths (0.03) grain per dry standard cubic foot(dscf)). The sprue removal process is not a melting process or a cupola, so it is not limited by subsection (e), or any other subsection listed above. It is, therefore, limited by 326 IAC 6-1-2(a). Based on CP 880012-5, the sprue removal process has a total exhaust flow rate of 34,000 acfm (34,000 dscfm). The particulate limit of 0.07 g/dscm, and the exhaust flow rate yield 38.3 tons of PM and PM10 per twelve (12) consecutive month period. A more detailed discussion has been added as follows for clarity:

~~D.4.1 Particulate Matter (PM) [326 IAC 2-2][326 IAC 6-1-2][CP 0980012-01][CP 880012-5]~~

- (a) Pursuant to 326 IAC 6-1-2 and CP 0980012-01, issued on February 24, 1998, particulate matter emissions from the finishing line A/System #1, Unit 32, and finishing line B/System 2, Unit 33 shall each be limited to particulate matter emissions of no greater than seven-hundredths (0.07) g/DCM (three-hundredths (0.03) grain /dscf).
- (b) Pursuant to 326 IAC 6-1-2 ~~and 1998~~, and CP 880012-5, issued on January 11, 1988, and in order that the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) do not apply, the sprue removal process, Unit 6, shall each be limited to particulate matter emissions of no greater than seven-hundredths (0.07) g/DCM (three-hundredths (0.03) grain/dscf). **Pursuant to CP 880012-5, the total exhaust flow rate for the sprue removal process is 34,000 cubic feet per minute (acfm).** This is equivalent to 38.3 tons of PM and PM 10 per twelve (12) consecutive month period.

Comment 31:

Condition D.5.4, VOC Limitation: CP 970012-03, issued on April 25, 1997, does not contain a VOC emissions limit on a pounds VOC per ton of cores basis. This is a new emissions limit and should be removed from the Part 70 permit.

Response 31:

The limit of 2.1 pounds of VOC per ton of cores is based solely on the limits set in CP 970012-03. CP 970012-03 limits Daimler Chrysler to emissions of 310.7 tons VOC per year for the Core Room. It also limits the Core Room to 298,840 tons of core per consecutive twelve (12) month period. These two limits are equivalent to 2.1 pounds VOC per ton cores processed. The emissions limit of 310.7 tons per year is not practically enforceable because it is difficult to measure, and long term. Demonstrating compliance with such a limit is virtually impossible without CEMs. No change has been made as a result of this comment.

Comment 32:

Condition D.5.7(a), Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units: The boilers are subject to the Standards of performance for New Stationary Sources in 40 CFR 60 Subpart Dc. However, for natural gas-fired units, there are no applicable emission standards identified in the Subpart. The only requirement applicable to natural gas-fired units is to keep a record of fuel usage for each day. USEPA has documented its position on the recordkeeping requirement stating that monthly records are acceptable as a means of complying with the applicable provisions of Subpart Dc. Therefore, Daimler Chrysler requests that this be reflect in Condition D.5.7 (a).

Response 32:

IDEM and OES do not have authority to make this change. Pursuant to 40 CFR 60.13(i), a letter must be submitted by the Permittee to US EPA to obtain approval for this change.

Comment 33:

Condition D.5.18, Parametric Monitoring for Acid Scrubbers:

- (a) Daimler Chrysler requests that the text "or as specified in the Compliance Response Plan" be added as an additional means to specify the appropriate ranges.
- (b) Daimler Chrysler also requests that readings be required on a weekly basis.

Response 33:

- (a) The statement "or as specified in the Compliance Response Plan" can not be included. The Compliance Response Plan may indicate that no response action is necessary under certain circumstances. One example would be a low reading soon after re-bagging. The Compliance Response Plan may state that no response step is necessary as long as pressure drop returns to normal within a specified number of operating hours. The pressure drop range must be in the permit to prevent the range from being so wide as to make pressure drop monitoring useless. No change has been made to D.5.18 as a result of this comment.
- (b) Compliance monitoring conditions are in the permit in order to ensure continuous compliance with the requirements. Monitoring of scrubber operational parameters should be more frequently than daily in such cases where a source operates more than one shift per day because baghouse failure can occur suddenly. The OAQ believes that pressure drop readings once per operating shift is a reasonable requirement. No changes have been made as a result of this comment.

Comment 34:

Conditions D.6.2 and D.6.5, Compliance Monitoring Requirements:

- (a) IDEM, OAQ and OES are correct that the subject baghouse designated CE-1522 was installed in accordance with requirements of Agreed Judgement 49F12912OV4977. However, the Agreed Judgement required Daimler Chrysler to apply for and obtain a construction permit for installation of that baghouse. Daimler Chrysler submitted a permit application for baghouse CE-1522 in accordance with the Agreed Judgement and OES issued Construction Permit 960012-02 for Refuse Bunker, including baghouse CE-1522.

All requirements of the 1996 Agreed Judgement have been fully satisfied and as a result, it has not further legal force and effect. It is not appropriate to reference the Agreed Judgement as imposing any continuing obligation. Construction Permit CP 960012-02 was issued for

baghouse CE-1522 and only that construction permit should be identified in the Part 70 Permit.

- (b) Daimler Chrysler also requests that the grain loading requirement and the air flow rate be removed.
- (c) In addition to the foregoing revisions, the language referencing the PSD preconstruction permitting requirements should be removed. OES and IDEM, OAQ lack the requisite legal authority to apply retroactively the PSD requirements to previously permitted equipment or processes at IFP and/or to create new "applicable requirements" through the Part 70 permitting process.

Response 34:

- (a) References to 1996 Agreed Judgement have been removed. Condition D.6.2 has been revised as follows:

~~D.6.2 Particulate Matter less than 10 Micron (PM10) [326 IAC 2-2][326 IAC 6-1-2][CP 960012-02] [Agreed Judgement 49F1294120V4977]~~
Pursuant to CP 960012-02 issued on February 29, 1996, and an Agreed Judgement, 49F1294120V4977, dated January 29, 1996, and in order that the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) do not apply to the Refuse Bunker Area, Unit 34, the baghouse grain loading shall be 0.0044 gr/dscf **and** (3.39 pounds per hour (lb/hr)) ~~and the air flow rate shall be 90152 acfm~~ which is equivalent to PM and PM-10 emissions of less than 15 tons per consecutive twelve month period. Compliance with this limit satisfies the requirements of 326 IAC 6-1-2.

Condition D.6.5 has been revised as follows:

~~D.6.5 Particulate Matter (PM) [Agreed Judgement 49F1293120V4977]~~
Pursuant to Agreed Judgement 49F1293120V4977, dated January 29, 1996, The baghouse, CE-1522, for PM control shall be in operation and control emissions from the Refuse Bunker Area, identified as Unit 34, at all time the Sand Screening/Bleed off is in operation.

- (b) The grain loading and air flow rate requirements are from the Construction Permit CP 960012-02. The grain loading requirement is necessary to comply with CP 960012-01, and 326 IAC 6-1-2. The air flow requirement has been removed as follows:

~~D.6.2 Particulate Matter less than 10 Micron (PM10) [326 IAC 2-2][326 IAC 6-1-2][CP 960012-02]~~
Pursuant to CP 960012-02 issued on February 29, 1996, and in order that the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) do not apply to the Refuse Bunker Area, Unit 34, the baghouse grain loading shall be 0.0044 gr/dscf **and** (3.39 pounds per hour (lb/hr)) ~~and the air flow rate shall be 90152 acfm~~ which is equivalent to PM and PM-10 emissions of less than 15 tons per consecutive twelve month period. Compliance with this limit satisfies the requirements of 326 IAC 6-1-2.

- (c) The language referencing PSD will remain in order to clarify that PSD does not apply as a result of this requirement.

Comment 35:

Condition D.6.5, Particulate Matter (PM): The language "at all times the Sand Screening/Bleed off is in operation" should be deleted since it is not part of the Bunker Area. The emission unit is already

addressed in Condition D.2.8 that covers the IML.

Response 35:

Condition D.6.5 has been changed as follows:

D.6.5 Particulate Matter (PM)

The baghouse, CE-1522, for PM control shall be in operation and control emissions from the Refuse Bunker Area, identified as Unit 34, at all times the ~~Sand Screening/Bleed-off Refuse Bunker Area~~ **Refuse Bunker Area** is in operation.

Comment 36:

Technical Support Document (TSD):

- (a) Daimler Chrysler requests that any changes in the draft Part 70 Permit be reflected as appropriate in an addendum to the Technical Support Document.
- (b) The TSD includes in the Source Description section a determination that the Demonstration Plant previously owned and operated by International Recycling, Inc. (IRI) was one of the two "plants" that comprised the "single stationary source" for which the draft permit was developed. This determination is incorrect and all references to the facility previously owned and operated by IRI should be deleted from the TSD and from the final Part 70 Permit issued for the IFP. Given that operations at the IRI facility terminated in early 2003 and will not be resumed and there is no longer a contract between DCC and IRI, DCC questions why OES and IDEM, OAQ included any reference to this closed facility.

By letter dated November 30, 1999 and May 15, 2002, DCC provided OES and IDEM, OAQ with specific and detailed information in response to formal Notices of Deficiency to demonstrate that the IRI Demonstration Plant was not part of the IFP "single stationary source" and should not be included in the Part 70 permitting decision for the IFP or for any permitting decisions made for the IFP. As documented in DCC's previous two submittals, the IRI facility and the IFP do not constitute a "single stationary source" as those terms are defined by applicable federal and Indiana law and regulations. OES and IDEM, OAQ have never responded to either the November 30, 1999 or the May 15, 2002 submittals by DCC and the draft Part 70 Operating Permit is the first indication that the agencies disagreed with DCC's submittals.

The analysis conducted by OES and/or IDEM, OAQ is flawed as to whether IRI's Tibbs Plant was properly combined with the Indianapolis Foundry and treated as a "single stationary source" under the permitting regulations. Given that the IFP and IRI's Tibbs Plant have different SIC codes, they can be considered a single source only if IRI's Tibbs Plant is a "support facility" for the IFP.

Given that a very small percentage of unused core sand was sent to IRI for reclamation and a very small amount of "reclaimed" core sand was used in DCC's foundry operations, it cannot be said that IRI's Tibbs Plant was a "support facility" for the IFP. IRI processed approximately 162, 565 tons of sand in 1999, most of which came from other suppliers. During that time period, DCC received from IRI approximately 11,000 tons of "reclaimed" core sand. Of the 11,000 tons of "reclaimed" core sand shipped to the Foundry, DCC used approximately 1,000 tons of IRI "reclaimed" core sand in trial operations. DCC did not participate in the IRI's operations and was not privy to its business records, but DCC understands that the remaining 152, 000 tons of sand that IRI processed in 1999 was beneficially reused as construction materials, raw material for

cement manufacturing and in other applications. None of the 152,000 tons of sand produced by the IRI Tibbs facility was returned to the IFP or utilized in any way to “support” foundry operations.

Finally, there is a lack of common control over IRI’s operation and the IFP. In DCC’s previous submittals to OES and IDEM, OAQ, DCC provided a significant amount of detailed information to demonstrate the lack of “common control” over IRI’s operations.

DCC has demonstrated that the IFP and IRI’s Tibbs Plant were never, and are not now, a “single stationary source.” These two facilities do not share the same SIC code. IRI’s Tibbs Plant does not “support” foundry operations or production of the principal product, i.e. engine blocks, at IFP. There was never common ownership or “common control” of these two facilities. At most, the IRI Tibbs Plant could be considered an independent research and development facility for the IFP, a status that dictates they be considered separate stationary sources under the Part 70 regulations.

Response 36:

- (a) This addendum to the TSD serves to reflect any changes in the draft Part 70 Permit.
- (b) More than 50% of the sand processed by IRI Tibb’s came from other suppliers, and more than 50% of that sand was used for applications not involving DCC. IRI can not be considered a support facility for DCC. Therefore, IRI and IFP are not considered a single stationary source.

Comment 37:

The enforcement action listed as pending in the TSD, items (a) through (c) under “Enforcement Issue”, are no longer pending and should not be included in the TSD. IDEM has already reviewed these matters and taken appropriate action.

Response 37:

Upon further review, IDEM, OAQ and OES agree that items (a) through (c) under “Enforcement Issue” are no longer pending issues and should not be listed in the TSD. This addendum serves to reflect that change.

Upon further review, OAQ and OES have made the following changes to the final Part 70 permit:

Change 1:

Condition C.19, Emission Statement: Revisions to 326 IAC 2-6 (Emission Reporting) became effective March 27, 2004. These revisions change the submission date for annual emission statements from April 15 to July 1. Since this source is required to have an operating permit under 326 IAC 2-7, Part 70 Permit Program, this source is subject to 326 IAC 2-6 (Emission Reporting). The source also has potential to emit greater than or equal to 250 tons per year of volatile organic compounds; therefore, an emission statement covering the previous calendar year must be submitted by July 1 annually. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4. As a result of the revision to 326 IAC 2-6 (Emission Reporting), the following changes have been made to the permit:

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

-
- (a) ~~The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by April 15 of each year and must~~

~~comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:~~ 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** criteria pollutants ~~from the source, in compliance with listed in 326 IAC 2-6-4(a) (Emission Reporting);~~
 - (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 purposes of Part 70 fee assessment.
- (b) The annual emission statement covers the twelve (12) consecutive month time period starting December 1 and ending November 30. The annual emission statement must be submitted to:

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

and

City of Indianapolis
Office of Environmental Services
2700 South Belmont Avenue
Indianapolis, Indiana 46227

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

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

Change 2:

In accordance with the credible evidence rule (62 Fed. Reg. 8314, Feb 24, 1997); Section 113(a) of the Clean Air Act, 42 U.S. C. § 7413 (a); and a letter from the United States Environmental Protection Agency (USEPA) to IDEM, OAQ dated May, 18 2004, all permits must address the use of credible evidence; otherwise, USEPA will object to the permits. The following language will be incorporated into the permit to address credible evidence:

B.24 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314]

Notwithstanding the conditions of this permit that state specific methods that may be used to demonstrate compliance with, or a violation of, applicable requirements, any person (including the Permittee) may also use other credible evidence to demonstrate compliance with, or a violation of, any term or condition of this permit.

Change 3:

On April 15, 2004, the United States Environmental Protection Agency (U.S. EPA) named 23 Indiana counties and one partial county nonattainment for the new 8-hour ozone standard. The designations became effective on June 15, 2004. Marion County has been designated as nonattainment for the 8-hour ozone standard. The following has been added to A.1 General Information:

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

The Permittee owns and operates a grey iron foundry, including core making, metal melting, sand molding, cleaning and finishing of final cast pieces to produce engine block castings.

Responsible Official: Plant Manager
 Source Address: 1100 South Tibbs Avenue, Indianapolis, IN 46241
 Mailing Address: 1100 South Tibbs Avenue, Indianapolis, IN 46241
 General Source Phone #: (317) 240-4861
 SIC Code: 3321
 County Location: Marion
 County Status: **Nonattainment for ozone under the 8-hour standard**
~~Attainment for all criteria pollutants~~
 Source Status: Part 70 Permit Program
 Major Source, under PSD and Emission Offset Rules and
Nonattainment NSR;
 Major Source, Section 112 of the Clean Air Act

Although the Technical Support Document (TSD) will not be revised as it is a historical document and the TSD was correct at the time of public notice, the following is being provided to show how the county attainment status has been affected as a result of the 8-hour ozone standard designations. The county attainment status regarding other pollutants remain unchanged; therefore will not be shown below other than in the table County Attainment Status.

The source is located in Marion County.

Pollutant	Status
PM-10	unclassifiable
SO ₂	maintenance attainment
NO ₂	attainment
1-hour Ozone	maintenance attainment
8-hour Ozone	basic nonattainment
CO	attainment
Lead	unclassifiable

~~(a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Marion County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.~~

(a) Volatile organic compounds (VOC) and Nitrogen Oxides (NO_x) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. Marion County has been designated as nonattainment for the 8-hour ozone standard. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for

nonattainment new source review.

Appendix A: Emission Calculations

Company Name: DaimlerChrysler Corporation - Indianapolis Foundry
 Plant Location: 1100 South Tibbs, Indianapolis, IN 46241
 Title V #: T097-6485-00012
 Permit Reviewer: Angelique Olliger
 Pollutants: PM and PM10
 Facility: Impact Mold Line

** Process Emissions **

Process: Pouring/Casting (Pouring Unit 5a) SCC# 3-04-003-18

Rate (tons iron/hr)	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Eac (ton/yr)	Type of control	Control Efficiency
69.9	PM	4.20	1285.88	12.86	baghouse	99.00%
	PM-10	2.06	630.69	6.31	baghouse	99.00%
	SO2	0.02	6.12	6.12		
	NOx	0.01	3.06	3.06		
	VOC	0.14	42.86	42.86		
	CO	---	0.00	0.00		
	chromium	0.00160	0.49	0.49		
	cobalt	0.00013	0.04	0.04		
	nickel	0.00281	0.86	0.86		
	arsenic	0.00055	0.17	0.17		
	cadmium	0.00025	0.08	0.08		
	selenium	0.00004	0.01	0.01		
	Lead	0.01617	4.95	4.95		

Allowable Emissions:

The following calculations determine PM compliance with 326 IAC 6-1-2:
 limit = 0.03 gr/dscf x 51000 scf/min x 1 lb/7000 gr x 60 min/hr = 13.1 lb/hr (allowable)

with potential: 12.9 tons/yr x 2000 lb/ton / 8760 hr/yr = 2.9 lb/hr (will comply)

Process: Castings Cooling (Cooling Unit 5b) SCC# 3-04-003-25

Rate (tons iron/hr)	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Eac (ton/yr)	Type of control	Control Efficiency
69.9	PM	1.40	428.63	4.29	baghouse	99.00%
	PM-10	1.40	428.63	4.29	baghouse	99.00%
	SO2	0.00	0.00	0.00		
	NOx	0.00	0.00	0.00		
	VOC	0.00	0.00	0.00		
	CO	---	0.00	0.00		
	Lead	---	0.00	0.00		

Allowable Emissions:

The following calculations determine PM compliance with 326 IAC 6-1-2:
 limit = 0.03 gr/dscf x 51000 scf/min x 1 lb/7000 gr x 60 min/hr = 13.1 lb/hr (allowable)

with potential: 4.3 tons/yr x 2000 lb/ton / 8760 hr/yr = 1.0 lb/hr (will comply)

Process: Castings Shakeout (Unit 28) SCC# 3-04-003-31

Rate (tons iron/hr)	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Eac (ton/yr)	Type of control	Control Efficiency
69.9	PM	3.20	979.72	9.80	baghouse	99.00%
	PM-10	2.24	685.80	6.86	baghouse	99.00%
	SO2	0.00	0.00	0.00		
	NOx	0.00	0.00	0.00		
	VOC	1.20	367.39	367.39		
	CO	---	0.00	0.00		
	chromium	0.00122	0.37	0.37		
	cobalt	0.00010	0.03	0.03		
	nickel	0.00214	0.66	0.66		
	arsenic	0.00042	0.13	0.13		
	cadmium	0.00019	0.06	0.06		
	selenium	0.00003	0.01	0.01		
	Lead	0.01232	3.77	3.77		
	Manganese	0.00530	1.62	1.62		
	Benzene	0.03470	10.62	10.62		
	Toluene	0.01700	5.20	5.20		
	Phenol	0.00580	1.78	1.78		
	xylene	0.00440	1.35	1.35		

Allowable Emissions:

The following calculations determine PM compliance with 326 IAC 6-1-2:
 limit = 0.03 gr/dscf x 73739 scf/min x 1 lb/7000 gr x 60 min/hr = 18.96 lb/hr (allowable)

with potential: 9.8 tons/yr x 2000 lb/ton / 8760 hr/yr = 2.2 lb/hr (will comply)

Process: Punch up Push off (Unit 26)

Rate (tons iron/hr)	Pollutant	Ef* (lb/ton produced)	Ebc (ton/yr)	Eac (ton/yr)	Type of control
70.1	PM	0.04	10.87	10.87	venturi scrubber
	PM-10	0.04	10.87	10.87	venturi scrubber
	SO2	negligible	0.00	0.00	none
	NOx	negligible	0.00	0.00	none
	VOC	0.36	109.09	109.09	none
	CO	negligible	0.00	0.00	none
	Benzene	0.03	10.65	10.65	none
	Toluene	0.02	5.22	5.22	none

Allowable Emissions:

The following calculations determine PM compliance with 326 IAC 6-1-2:
 limit = 0.03 gr/dscf x 146000 scfm x 1 lb/7000 gr x 60 min/hr = 37.5 lb/hr (allowable)

with potential: 10.9 tons/yr x 2000 lb/ton / 8760 hr/yr = 2.5 lb/hr (will comply)

*Emission Factors based on stack tests conducted at this source for PM (July 1995) and VOC (November 1994).

Process: Sand Handling (Unit 4) SCC# 3-04-003-50

Rate (tons sand/hr)	Pollutant	Ef, uncontrolled (lb/ton produced)	Ef, controlled (lb/ton produced)	Ebc (ton/yr)	Eac (ton/yr)	Type of control
70.1	PM	3.6	0.0195	1105.3	6.0	wet scrubber
	PM-10	3.6	0.0195	1105.3	6.0	wet scrubber
	VOC	0.131	0.131	40.2	40.2	

Allowable Emissions:

The following calculations determine PM compliance with 326 IAC 6-1-2:
 limit = 0.03 gr/dscf x 146000 scfm x 1 lb/7000 gr x 60 min/hr = 37.5 lb/hr (will comply)

with potential: 6.0 tons/yr x 2000 lb/ton / 8760 hr/yr = 1.4 lb/hr

Methodology:

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

*Emission Factors based on AP-42 Table 12.10-7.

Metal HAPs emissions factors based on fraction of metal composition of PM/PM10
 VOC HAPs based on fraction of total VOC based on Ashland Chemical Report, Scott, Bates, & James Paper, and EPA factors

Appendix A: Emissions calculation

Company Name: Daimler Chrysler Corporation - Indianapolis Foundry
 Address : 1100 South Tibbs Avenue, Indianapolis, IN 46241-2797
 Permit No.: T097-6485-00012
 Reviewer: Angelique Oligier

Units 1N
 2N
 3N

Facility Information							
	Rated capacity	gr/dscf	cfm	Stk Temp.	lbs/hr	Efficiency	
Cupola	75 tons/hr	0.02	72,000	320	8.39	99%	
Holding Furnace	75 tons/hr	0.02	50,000	150	7.45	99%	
Coke & Stone Handling	12.9 tons/hr	0.02	50,000	100	8.11	99%	

Emission Factors, lbs/ton of metal¹

	PM	PM-10	Pb	CO	SO2	NOx	VOC
Cupola	0.11	0.11	1.71E-03	1.33	0.33	0.16	0.01
Holding Furnace	0.10	0.10	3.81E-04	0.00	0.00	0.00	0.00
Coke & Stone Handling	0.63	0.63	1.94E-04	0.00	0.00	0.00	0.00

Emissions, tons/year (potential, before control)

Cupola	0.00	0.00	56.21	43800.00	109.50	52.56	328.50
Holding Furnace	3261.92	3261.92	12.51	0.00	0.00	0.00	0.00
Coke & Stone Handling	3553.16	3553.16	1.10	0.00	0.00	0.00	0.00
Totals	6815.08	6815.08	69.81	43800.00	109.50	52.56	328.50

Emissions, tons/year (potential, limited, before control)

Cupola	0.00	0.00	34.22	26666.67	66.67	32.00	200.00
Holding Furnace	1985.95	1985.95	7.61	0.00	0.00	0.00	0.00
Coke & Stone Handling	2163.27	2163.27	0.67	0.00	0.00	0.00	0.00
Totals	4149.21	4149.21	42.50	26666.67	66.67	32.00	200.00

Emissions, tons/year (potential, after control)

Cupola	0.00	0.00	0.56	438.00	109.50	52.56	3.29
Holding Furnace	32.62	32.62	0.13	0.00	0.00	0.00	0.00
Coke & Stone Handling	35.53	35.53	0.01	0.00	0.00	0.00	0.00
Totals	68.15	68.15	0.70	438.00	109.50	52.56	3.29

Emissions, tons/year (limited, after control)²

Cupola	22.36	22.36	0.34	266.67	66.67	32.00	2.00
Holding Furnace	19.86	19.86	0.08	0.00	0.00	0.00	0.00
Coke & Stone Handling	21.63	21.63	0.01	0.00	0.00	0.00	0.00
Totals	63.86	63.86	0.43	266.67	66.67	32.00	2.00

(1) Based on a stack test results after controls for PM, Pb, CO, NOx and VOC; on AP-42 for SO2.

(2) Based on a 400,000 ton/year metal melt limit.

Appendix A: Emissions calculation

Company Name: Daimler Chrysler Corporation - Indianapolis Foundry
Address : 1100 South Tibbs Avenue, Indianapolis, IN 46241-2797
Permit No.: T097-6485-00012
Reviewer: Angelique Oligier

HAP	Maximum Rate (tons/hr)	Emissions Factor (lb/ton)	Potential Emissions (ton/yr) ¹	Limited Controlled Emissions (ton/yr) ²
Chromium	70.10	1.9E-03	0.58	0.004
Manganese	70.10	5.4E-03	1.66	0.010
Nickel	70.10	7.0E-04	0.21	0.001
Benzene	70.10	5.1E-02	15.51	0.094
Formaldehyde	70.10	1.0E-03	0.31	0.002
Naphthalene	70.10	1.0E-04	0.03	0.000
Toluene	70.10	9.3E-03	2.86	0.017
Phenol	70.10	2.1E-02	6.29	0.038
Xylene	70.10	1.8E-02	5.37	0.033
Acrolein	70.10	5.0E-04	0.15	0.001
Total			32.98	0.20

Emission Factors Source: Metal HAPs - fraction of PM/PM10 based upon metal composition
 VOC HAPs - fraction of total VOC based upon Ashland Chemical Report, Scott, Bates & James Paper, and EPA factors

Potential = rate (tons/yr) * emis fac (lb/ton) * 1 ton / 2000 lb * 8760 hr / yr
 Limited = Potential * 400,000 tons / 657000 tons * (1-99.99)

Appendix A: Emissions Calculations

Company Name: DaimlerChrysler Corporation - Indianapolis Foundry
 Plant Location: 1100 South Tibbs Avenue, Indianapolis, IN 46241
 County: Marion
 Permit Reviewer: Angelique Oliger
 Title V #: 097-6485-00012

Unit 44

** Process Emissions **

Process: Block Shaking Process 44
 Rate (tons iron/hr) 75.0

Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Eac (ton/yr)	Control Type	Control Efficiency	Limited (45 tons iron/hr)
PM	0.004	39.82	1.31	Baghouse	96.70%	0.79
PM10	0.004	39.82	1.31	Baghouse	96.70%	0.79
SO2	0.00	0.00	0.00			0.00
NOx	0.00	0.00	0.00			0.00
VOC	0.00	0.00	0.00			0.00
CO	---	0.00	0.00			0.00
chromium	0.00122	0.40	0.40			0.24
cobalt	0.00010	0.03	0.03			0.02
nickel	0.00214	0.70	0.70			0.42
arsenic	0.00042	0.14	0.14			0.08
cadmium	0.00019	0.06	0.06			0.04
selenium	0.00003	0.01	0.01			0.01
Lead	0.01232	4.05	4.05			2.43

Allowable Emissions:

The following calculations determine PM compliance with 326 IAC 6-1-2:

limit = $0.03 \text{ gr/dscf} \times 120000 \text{ scf/min} \times 1 \text{ lb/7000 gr} \times 60 \text{ min/hr} = 30.86 \text{ lb/hr}$ (allowable)

with potential:

$75.0 \text{ tons/yr} \times 2000 \text{ lb/ton} / 8760 \text{ hr/yr} = 17.12 \text{ lb/hr}$ (will comply)
 $75.0 \text{ tons/yr} \times 2000 \text{ lb/ton} / 8760 \text{ hr/yr} = 17.12 \text{ lb/hr}$ (will comply)

Emission Factors based on AP-42 12.10, except PM/PM10 from 2002 stack test.

Appendix A: Emissions calculation
 Company Name: DaimlerChrysler Corporation - Indianapolis Foundry
 Plant Location: 1100 South Tibbs Avenue, Indianapolis, IN 46241
 County: Marion
 Permit Reviewer: Angelique Olinger
 Title V #: 097-6485-00012

Finishing line A, EU 32
 Finishing line B, EU 33
 Cleaning Room Heaters, EU 11N-1 through EU11N-8

Facility Information					
	Rated capacity	gr/dscf	cfm	Stk Temp.	lbs/hr
New Finishing Line A	37.5 tons/hr	0.011	170,000	70	16.50
New Finishing Line B	37.5 tons/hr	0.011	170,000	70	16.50
Cleaning Room Heaters	41.6 MMBtu/hr				

Potential Emissions (before control)		
Emission Factor (PM, PM10)	17	lb/ton
Capacity	75	ton/hr
PM (PM10)	5,585	ton/yr
Lead	0.000	ton/yr

	Emission Factors						
	PM	PM-10	Pb	CO	SO2	NOx	VOC
New Finishing Line A (lb/ton)	0.440	0.440	0	0	0	0	0
New Finishing Line B (lb/ton)	0.440	0.440	0	0	0	0	0
Cleaning Room Heaters (lbs/MMBtu)	1.9	7.6	0.6	50	5.5	84	0

Potential Emissions, tons/year							
New Finishing Line A	0.0	0.0	0.000	0.000	0.000	0.000	0.000
New Finishing Line B	0.0	0.0	0.000	0.000	0.000	0.000	0.000
Cleaning Room Heaters ¹ (eight)	0.346	1.385	0.000	0.109	9.110	1.002	15.305
Totals	0.3	1.4	0.000	0.109	9.110	1.002	15.305

(1) See page 11 of App A for Calculations.

Contemporaneous Increases and Decreases in the Past Five Years, Tons/Year ²							
	PM	PM-10	Lead	CO	SO2	NOx	VOC
Existing Cupola Melt System Emissions Shut Down Decrease	51.0	51.0	0.58	31,048	91.8	15.1	91.7
New Cupola Melt System Emissions Increase	63.9	63.9	0.43	266.7	66.7	32.0	2.7
New Cupola Net Emissions Increase (Decrease)	12.8	12.8	-0.2	-30781.2	-25.2	16.9	-89.0
New Core Room Net Emissions Increase (Decrease)	1.3	0.8	0	5.1	-17	-3.3	36.7
Total New Cupola and Core Room Contemporaneous Emissions Increase (Decrease)	14.1	13.6	-0.2	-30776	-42.2	13.6	-52.3
PSD & Offset Significance Level	25	15	0.60	100	25	40	40

(2) See Page 10 of App A for a detailed calculations.

Allowable new Cleaning Department Increase³	10.9	1.4	0.75	30876	67.2	26.4	92.3
Current Cleaning Department Emissions	86.6	86.6	0.01	0	0	0	0
Allowable new Cleaning Department Emissions ⁴	97.5	88.0	0.76	30,876	67.2	26.4	92.3
Heaters (Potential Emissions)	0.346	1.385	0.000	0.109	9.110	1.002	15.305
New Finishing Lines Allowable Emissions ⁵	97.1	86.6	0.8	30,876	58.1	25.4	77.0
Proposed new Cleaning Department Emissions (with Heaters)⁶	86.9	88.0	0.0	0.1	9.1	1.0	15.3
Proposed new Finishing Lines A & B Emissions⁷	86.6	86.6	0.0	0.0	0.0	0.0	0.0
Allowable Grain loading, gr/dscf (Finishing Lines) ⁸	0.011	0.011					
Total Contemporaneous Increase (Decrease)	14.5	15.0	-0.2	-30775.95688	-33.1	14.6	-37.0
Allowable Emission Rates for Finishing Lines A and B, lb/ton	0.433	0.433					

(3) Significance Level - Total Emissions Increase (Decrease)

(4) Allowable Increase + Current Emissions

(5) Allowable Emissions - Heaters Emissions

(6) Cleaning Emissions + Heater Emissions

(7) Proposed Emissions - Heaters Emissions

(8) Grain Loading = 86.5 ton/yr * 2000 lb/ton * 7000 gr/lb / (5333 hr * 60 min/hr * 170,000 cfm * 2) = 0.011 gr/dscf

* At Production Limit 400,000 ton/yr of Metal Melted (New Cupola Melt System Limit)

Potential Production (at 75 ton/hr and 8760 hr/yr):	657,000	ton/yr
Production Limit	400,000	ton/yr
Limited Operation Hours	5,333	hr
Grain Loading at 87.5 ton/yr PM10 (PM) Finishing Lines emission	0.011	gr/dscf

Appendix A: Emissions calculation
 Company Name: DaimlerChrysler Corporation - Indianapolis Foundry
 Plant Location: 1100 South Tibbs Avenue, Indianapolis, IN 46241
 County: Marion
 Permit Reviewer: Angelique Olinger
 Title V #: 097-6485-00012

Facility Information									
	Rated Capacity	Units	gr/dscf	cfm	Stk Temp.	lbs/hr	Efficiency	1995 Production	1996 Production
Current Equipment									
Cupola with scrubber	55	tons/hr	0.061	41,143	124	16.6	95%	189,150	218,947
2 Induction Holding Furnaces	55	tons/hr	0.0138	40,000	130	3.13	99%	189,150	218,947
Coke & Sand (Torit #1)	9.5	tons/hr	0.011	40,000	88	3.37	99%	32,624	67,200
Wet Schrieble	9.5	tons/hr	0.0036	40,000	70.3	0.904	99%	15	20
Cupola Hot Blast Burner	42	MMBtu/hr						88.2	88.2
Proposed Equipment									
	Rated capacity		gr/dscf	cfm	Stk Temp.	lbs/hr	Efficiency		
Cupola	75	tons/hr	0.02	72,000	320	8.39	99%		
Holding Furnace	75	tons/hr	0.02	50,000	150	7.45	99%		
Coke & Stone Handling	12.9	tons/hr	0.02	50,000	100	8.11	99%		

Emission Factors, lbs/ton of metal							
	PM	PM-10	Pb	CO	SO2	NOx	VOC
Current Equipment *							
Cupola with scrubber	0.354	0.354	0.0054	304.31	0.9	0.1044	0.8964
2 Induction Furnaces	0.057	0.057	0.0002	0	0	0	0
Coke and Stone Handling	0.355	0.355	0.0001	0	0	0	0
Wet Schrieble	0.095	0.095	0.0000	0	0	0	0
Cupola Hot Blast Burner *	6.2	6.2	0	21	0.6	100	5.8
Proposed Equipment ***							
Cupola	0.112	0.112	1.71E-03	1.333	0.333	0.160	0.013
Holding Furnace	0.099	0.099	3.81E-04	0	0	0	0
Coke & Stone Handling	0.629	0.629	1.94E-04	0	0	0	0

1995 Actual Emissions, Tons/Year							
Cupola with scrubber	33.5	33.5	0.51	28,780	85.1	9.9	84.8
2 Induction Furnaces	5.4	5.4	0.02	0	0.0	0.0	0.0
Coke and Stone Handling	5.8	5.8	0.00	0	0.0	0.0	0.0
Wet Schrieble	0.0	0.0	0.00	0	0.0	0.0	0.0
Cupola Hot Blast Burner	0.3	0.3	0.00	1	0.0	4.4	0.3
Totals	44.9	44.9	0.53	28,781	85.1	14.3	85.0

1996 Actual Emissions, Tons/Year							
Cupola with scrubber	38.7	38.7	0.59	33,314	98.5	11.4	98.1
2 Induction Furnaces	6.2	6.2	0.02	0	0.0	0.0	0.0
Coke and Stone Handling	11.9	11.9	0.00	0	0.0	0.0	0.0
Wet Schrieble	0.0	0.0	0.00	0	0.0	0.0	0.0
Cupola Hot Blast Burner	0.3	0.3	0.00	1	0.0	4.4	0.3
Totals	57.2	57.2	0.62	33,315	98.6	15.8	98.4

Actual Emissions: Two Year Average, Tons/Year							
Cupola with scrubber	36.1	36.1	0.55	31,047	91.8	10.6	91.5
2 Induction Furnaces	5.8	5.8	0.02	0	0.0	0.0	0.0
Coke and Stone Handling	8.9	8.9	0.00	0	0.0	0.0	0.0
Cupola Hot Blast Burner	0.3	0.3	0.00	1	0.0	4.4	0.3
Totals	51.0	51.0	0.58	31,048	91.8	15.1	91.7

Proposed Emissions, tons/year (potential, before control)							
Cupola	3673.4	3673.4	56.2	43,800	109.5	52.6	438.0
Holding Furnace	3261.9	3261.9	12.5	0	0.0	0.0	0.0
Coke & Stone Handling	3563.2	3563.2	1.1	0	0.0	0.0	0.0
Totals	10498.5	10498.5	69.8	43,800	109.5	52.6	438.0

Proposed Emissions, tons/year (potential, limited, before control)							
Cupola	2236.5	2236.5	34.2	26,667	66.7	32.0	266.7
Holding Furnace	1985.9	1985.9	7.6	0	0.0	0.0	0.0
Coke & Stone Handling	2163.3	2163.3	0.7	0	0.0	0.0	0.0
Totals	6385.7	6385.7	42.5	26,667	66.7	32.0	266.7

Proposed Emissions, tons/year (potential, after control)							
Cupola	36.7	36.7	0.6	438.0	109.5	52.6	4.4
Holding Furnace	32.6	32.6	0.1	0.0	0.0	0.0	0.0
Coke & Stone Handling	35.5	35.5	0.0	0.0	0.0	0.0	0.0
Totals	104.9	104.9	0.7	438.0	109.5	52.6	4.4

Proposed Emissions, tons/year (limited, after control) ****							
Cupola	22.4	22.4	0.34	266.7	66.7	32.0	2.7
Holding Furnace	19.9	19.9	0.08	0.0	0.0	0.0	0.0
Coke & Stone Handling	21.6	21.6	0.01	0.0	0.0	0.0	0.0
Totals	63.9	63.9	0.43	266.7	66.7	32.0	2.7

Contemporaneous Increases and Decreases in the Past Five Years, Tons/Year *****							
Core Room Net Emissions Increase							
	1.3	0.8	0	5.1	-17	-3.3	36.7

Net Emissions Increase, Tons/Year							
Net Increase	14.1	13.6	-0.15	-30776.1	-42.2	13.6	-52.3
Significance Levels	25	15	0.60	100	25	40	40

** Based of a stack test results for PM, Pb, CO, NOx and VOC; on AP-42 for SO2.
 *** Based on manufacturer's design specifications.
 ***** Based on a 400,000 ton/year metal melt limit.
 ***** Construction Permit CP-970012-03

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

Company Name: DaimlerChrysler Corporation - Indianapolis Foundry
Plant Location: 1100 South Tibbs Avenue, Indianapolis, IN 46241
County: Marion
Permit Reviewer: Angelique Oliger
Title V #: 097-6485-00012

Heat Input Capacity
MMBtu/hr
8 @ 5.2 MMBtu/hr
41.6

Potential Throughput
MMCF/yr
364.4

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	1.9	7.6	0.6	50.0	5.5	84.0
				**see below		
Potential Emission in tons/yr	0.3	1.4	0.1	9.1	1.0	15.3

*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

Appendix A: Emissions calculation

Company Name: Daimler Chrysler Corporation - Indianapolis Foundry
 Plant Location: 1100 South Tibbs Avenue, Indianapolis, IN 46241
 County: Marion
 Permit Reviewer: Angelique Oliger
 Title V #: 097-6485-00012

** Process Emissions **

Process:

Sprue Removal

SCC# 3-04-003-31

Rate (tons iron/hr)	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Eac (ton/yr)
1.1	PM	0.03	0.14	0.14
	PM-10	0.03	0.14	0.14
	SO2	0.00	0.00	0.00
	NOx	0.00	0.00	0.00
	VOC	1.20	5.78	5.78
	CO	---	0.00	0.00
	chromium	0.00	0.01	0.01
	cobalt	0.00	0.00	0.00
	nickel	0.00	0.01	0.01
	arsenic	0.00	0.00	0.00
	cadmium	0.00	0.00	0.00
	selenium	0.00	0.00	0.00
	Lead	0.01	0.06	0.06

PM and PM10 emissions factors from 1988 Stack Test
 AP-42 Ch. 12.10

Allowable Emissions:

The following calculations determine PM compliance with 326 IAC 6-1-2:

limit = $0.03 \text{ gr/dscf} \times 34000 \text{ scf/min} \times 1 \text{ lb/7000 gr} \times 60 \text{ min/hr} = 8.70 \text{ lb/hr}$ (allowable)

with potential: $0.1 \text{ tons/yr} \times 2000 \text{ lb/ton} / 8760 \text{ hr/yr} = 0.0 \text{ lb/hr}$ (will comply)

Appendix A - Emission Calculations
Company Name: Daimler Chrysler Corporation - Indianapolis Foundry
Location: 1100 South Tibbs Avenue, Indianapolis, IN 46241
Permit No.: T097-6485-00012
Source/Facility: Core Making/Sand Transfer
Pollutants: VOC and HAPs
Reviewer: Angelique Olliger

Units 47A, 48 A, 49A, 47B, 48B, 49B

Table 1 - Core Room Revised VOC Netting Analysis Summary in tons/year

	Original	Revised
Past Actual VOC Emissions (average of 1994/1995)	274.00	588.20
NewCore Room Potential VOC Emissions	310.70	512.70
Net change in VOC Emissions	36.7	-75.5

298840 Limited core production/yr

*See below and page 13 of 15 of App
A for explanation of values in this table.

VOC Emission Estimates for Original New Core Room Potential

Material Description	VOC Content Wt %	% VOC emitted	Usage lb/lb resin	VOC emfac lb/lb material	Calculated lb/ton cores	Usage lbs/yr	VOC generation lb/ton cores	Control eff %	VOC emissions lb/ton cores	VOC emissions tons/yr
Iso Cure Resin Part I	7.0	50.0	0.56	0.035	14.280	4267435	0.50	0.0	0.500	74.71
Iso Cure Resin Part II	25.0	50.0	0.44	0.125	11.220	3352985	1.40	0.0	1.400	209.19
TEA Catalyst	100.0	100.0	0.13	1.000	3.315	990655	3.32	95.0	0.166	24.80
					28.815		5.22		2.07	309.70

note: Overall capture and control for TEA as VOC was estimated to be 95% and was to satisfy 326 IAC 8-1-6 requirements only

Natural Gas Fired Equipment	1.4
Total VOC PTE	310.7

VOC Emission Estimates for Revised New Core Room Potential

Material Description	VOC Content Wt %	% VOC emitted	Usage lb/lb resin	VOC emfac lb/lb material	Calculated lb/ton cores	Usage lbs/yr	VOC generation lb/ton cores	Control eff %	VOC emissions lb/ton cores	VOC emissions tons/yr
Iso Cure Resin Part I	7.0	50.0	0.56	0.035	14.280	4267435	0.50	0.00	0.500	74.71
Iso Cure Resin Part II	25.0	50.0	0.44	0.125	11.220	3352985	1.40	0.00	1.400	209.19
TEA Catalyst	100.0	100.0	0.13	1.000	3.315	990655	3.32	54.15	1.522	227.45
					28.815		5.22		3.42	511.30

note: Overall capture and control for TEA as VOC is estimated to be 54.15% (.57 capture x .95 control) and is to satisfy 326 IAC 8-1-6 requirements only
Compliance Demonstration: 3.42 lbs VOC/ton cores x (298,840 tons cores/2000 lbs/ton) = 511.3 tons per year

Natural Gas Fired Equipment	1.40
Total VOC PTE	512.7

Material Description	HAP Content Wt %	% HAP emitted	Usage lb/lb resin	HAP emfac lb/lb material	Calculated lb/ton cores	Usage lbs/yr	HAP generation lb/ton cores	Control eff %	HAP emissions lb/ton cores	HAP emissions tons/yr	HAP
Iso Cure Resin Part I	7.0	50.0	0.56	0.035	14.280	4267435	0.15	0.00	0.150	22.41	Naphthalene
Iso Cure Resin Part II	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.00	
TEA Catalyst	100.0	100.0	0.13	1.000	3.315	990655	3.32	95.00	1.522	227.42	TEA
					28.815		5.22		1.67	249.83	

note: Overall capture and control for TEA as VOC is estimated to be 54.15% (.57 capture x .95 control) and is to satisfy 326 IAC 8-1-6 requirements only
Compliance demonstration = 3.42 lbs VOC/ton x (298,840 tons cores/2000 lbs/ton) = 511.3 tons VOC/year

Total HAP PTE	249.83
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Appendix A - Emission Calculations
Company Name: Daimler Chrysler Corporation - Indianapolis Foundry
Location: 1100 South Tibbs Avenue, Indianapolis, IN 46241
Permit No.: T097-6485-00012
Source/Facility: TBD
Reviewer: Angelique Oliger

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	5.5	84.0
				**see below		
Potential Emission in tons/yr	0.166	0.666	0.053	8.760	0.482	7.358

*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

Appendix A - Emission Calculations
Company Name: Daimler Chrysler Corporation - Indianapolis Foundry
Location: 1100 South Tibbs Avenue, Indianapolis, IN 46241
Permit No.: T097-6485-00012
Source/Facility: Core Making/Sand Transfer
Pollutants: New vs. Old Core Making/Sand Transfer
Reviewer: Angelique Oliger

Past Actual VOC Emission Estimates for Existing Core Room

Emission Unit	Usage 1994	Rates 1995	Units	Emfac	Units	Emissions (tons/yr)		
						1994	1995	
Redry Oven B Line	15	12	MMCF/yr	5.3	lb/MMCF	0.04	0.03	
Post Cure Oven B Line	18	14	MMCF/yr	5.3	lb/MMCF	0.05	0.04	
Post Cure Oven B Line	19	15	MMCF/yr	5.3	lb/MMCF	0.05	0.04	
Iso Cure Drying Oven	14	11	MMCF/yr	5.3	lb/MMCF	0.04	0.03	
B1/B2 Core Drying Oven	14	11	MMCF/yr	5.3	lb/MMCF	0.04	0.03	
Redry Oven A Line	19	15	MMCF/yr	5.3	lb/MMCF	0.05	0.04	
Hotbox Line A Combustion	4	3	MMCF/yr	5.3	lb/MMCF	0.01	0	
Hotbox Line A Machines	36878	34095	tons/yr	1.1	lbs/ton	20.28	18.75	
Hotbox Line B Combustion	4	3	MMCF/yr	5.3	lb/MMCF	0.01	0	
Hotbox Line B Machines	36878	34095	tons/yr	1.1	lbs/ton	20.28	18.75	
Cold Box Machines	110635	102283	tons/yr	1.54	lbs/ton	85.06	78.64	
Cold Box Sand Mixers	110635	102283	tons/yr	2.87	lbs/ton	158.63	146.65	
Cold Box Core Wash	110635	102283	tons/yr	0.003	lbs/ton	0.17	0.15	
Average tons per year =						273.9	284.71	263.2

Material	Coldbox		Coremaking		VOC		Emission Factors	
	Weight % VOC	% Evaporated	lb VOC lost/lb material	lbs component/lb resin	lbs VOC per lb resin	lbs resin per ton cores	lbs VOC per ton of cores	
Iso Cure Part I	7	50	0.035	0.56	0.0196	38.44	0.753	
Iso Cure Part II	25	50	0.125	0.44	0.055	38.44	2.114	
Triethylamine (TEA)	100	100	1	0.2	0.2	38.44	1.54	

note: Overall 80% control efficiency applied for 2 years for TEA control in Cold Box Machines/add on control.
 Where: 0.2 lbs VOC / lb resin x 38.44 lbs resin / ton cores x (1 - 0.8 eff) = 1.54 lbs VOC / ton cores

Revised Past Actual VOC Emission Estimates for Existing Core Room (Calendar years 1994 and 1995)

Emission Unit	Usage Rates		Units	Emfac	Units	Emissions		
	1994	1995				1994	1995	
Redry Oven B Line	15	12	MMCF/yr	5.3	lb/MMCF	0.04	0.03	
Post Cure Oven B Line	18	14	MMCF/yr	5.3	lb/MMCF	0.05	0.04	
Post Cure Oven B Line	19	15	MMCF/yr	5.3	lb/MMCF	0.05	0.04	
Iso Cure Drying Oven	14	11	MMCF/yr	5.3	lb/MMCF	0.04	0.03	
B1/B2 Core Drying Oven	14	11	MMCF/yr	5.3	lb/MMCF	0.04	0.03	
Redry Oven A Line	19	15	MMCF/yr	5.3	lb/MMCF	0.05	0.04	
Hotbox Line A Combustion	4	3	MMCF/yr	5.3	lb/MMCF	0.01	0	
Hotbox Line A Machines	36878	34095	tons/yr	1.1	lbs/ton	20.28	18.75	
Hotbox Line B Combustion	4	3	MMCF/yr	5.3	lb/MMCF	0.01	0	
Hotbox Line B Machines	36878	34095	tons/yr	1.1	lbs/ton	20.28	18.75	
Cold Box Machines	110635	102283	tons/yr	7.69 / 7.17	lbs/ton	425.39	366.83	
Cold Box Sand Mixers	110635	102283	tons/yr	2.87	lbs/ton	158.63	146.65	
Cold Box Core Wash	110635	102283	tons/yr	0.003	lbs/ton	0.17	0.15	
Average tons per year =						588.2	625.04	551.3

Material	Coldbox		Coremaking		VOC		Emission Factors	
	Weight % VOC	% Evaporated	lb VOC lost/lb material	lbs component/lb resin	lbs VOC per lb resin	lbs resin per ton cores	lbs VOC per ton of cores	
Iso Cure Part I	7	50	0.035	0.56	0.0196	38.44	0.753	
Iso Cure Part II	25	50	0.125	0.44	0.055	38.44	2.114	
Triethylamine (TEA)	100	100	1	0.2	0.2	38.44	7.69 / 7.17	

note: Cold Box Machines VOC emfac assumes no control for 1994 and 80% for last month of 1995.
 Where: 0.2 lbs VOC / lb resin x 38.44 lbs resin / ton cores x (1 - no control eff) = 7.69 lbs VOC / ton cores for 1994 and
 Where: 0.2 lbs VOC / lb resin x 38.44 lbs resin / ton cores x [1 - (0.8 eff/12 months)] = 7.17 lbs VOC / ton cores for 1995

Appendix A - Emission Calculations
Company Name: Daimler Chrysler Corporation - Indianapolis Foundry
Location: 1100 South Tibbs Avenue, Indianapolis, IN 46241
Permit No.: T097-6485-00012
Source/Facility: Core Making Sand Transfer
Pollutants: PM/PM10
Reviewer: Angelique Olinger

Emission Point	Air Flow cfm	Original gr/dscf	Revised gr/dscf	Schedule hours	Revised PM 10 Emissions		
					lbs/hr	tons/yr	Allowable tons/yr
Transfer # 41	5750	0.03	0.011	8760	0.54	2.37	1.76
Transfer # 42	5750	0.03	0.011	8760	0.54	2.37	1.76
Transfer # 43	5750	0.03	0.011	8760	0.54	2.37	1.76
Transfer # 44	5750	0.03	0.011	8760	0.54	2.37	1.76
Sand Transfer	4790	0.03	0.011	8760	0.45	1.98	1.47
Rail Transfer	12840	0.03	0.011	8760	1.21	5.30	3.93
Totals						16.78	12.44

Appendix A - Emission Calculations
Company Name: Daimler Chrysler Corporation - Indianapolis Foundry
Location: 1100 South Tibbs Avenue, Indianapolis, IN 46241
Permit No.: T097-6485-00012
Source/Facility: Sand Refuse Bunker
Pollutants: PM/PM10
Reviewer: Angelique Oliger

Process:

Rate (tons sand/hr)	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Eac (ton/yr)	Type of control	Control Efficiency
450	PM	0.046	90.7	14.9	baghouse	83.60%
	PM-10	0.046	90.7	14.9	baghouse	83.60%

Allowable Emissions:

The following calculations determine PM compliance with 326 IAC 6-1-2.
 $0.03 \text{ gr/dscf} \times 90152 \text{ scfm} \times 1 \text{ lb/7000 gr} \times 60 \text{ min/hr} = 23.18 \text{ lb/hr}$

with potential:
 $14.9 \text{ tons/yr} \times 2000 \text{ lb/ton} / 8760 \text{ hr/yr} = 3.4 \text{ lb/hr}$ (will comply)

Methodology:

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

Appendix A - Summary of Emission Calculations
Company Name: Daimler Chrysler Corporation - Indianapolis Foundry
Location: 1100 South Tibbs Avenue, Indianapolis, IN 46241
Permit No.: T097-6485-00012
Pollutants: PM/PM10
Reviewer: Angelique Oligier

Unit	Uncontrolled Unlimited Potential to Emit (tons/yr)																				
	PM	PM-10	SO2	NOx	VOC	CO	Lead	Chromium	Cobalt	Nickel	Arsenic	Cadmium	Selenium	Naphthalene	Triethylamine	Benzene	Toluene	Manganese	Phenol	Xylene	Acrolein
IML	3810.43	2861.33	6.12	3.06	559.57	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.28	10.42	1.62	1.78	1.35	0.00
Cupola Melt System	0.00	0.00	109.50	52.56	328.50	43800.00	56.21	0.58	0.00	0.21	0.00	0.00	0.00	0.00	0.00	15.51	2.86	1.66	6.29	5.37	0.15
Block Shaking	39.82	39.82	0.00	0.00	0.00	0.00	4.05	0.40	0.03	0.70	0.14	0.06	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cleaning Room	86.95	87.98	0.11	1.00	15.31	0.11	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sprue Removal	15.42	10.79	0.00	0.00	5.78	0.00	0.00	0.01	0.00	0.00	0.00	0.06	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Core Room	0.17	0.67	0.05	8.76	311.18	7.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.41	227.42	0.00	0.00	0.00	0.00	0.00	0.00
Core Sand Transfer	16.78	16.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sand Refuse Bunker	90.67	90.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	4060.22	3108.04	115.79	65.38	1220.34	43807.47	60.29	1.00	0.04	0.92	0.14	0.12	0.02	22.41	227.42	36.78	13.28	3.28	8.07	6.72	0.15

Total HAPs 380.65

Unit	Controlled Limited Potential to Emit (tons/yr)																				
	PM	PM-10	SO2	NOx	VOC	CO	Lead	Chromium	Cobalt	Nickel	Arsenic	Cadmium	Selenium	Naphthalene	Triethylamine	Benzene	Toluene	Manganese	Phenol	Xylene	Acrolein
IML	43.80	34.31	6.12	3.06	559.57	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.28	10.42	1.62	1.78	1.35	0.00
Cupola Melt System	63.86	63.86	66.67	32.00	2.00	266.67	0.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.02	0.01	0.04	0.03	0.00
Block Shaking	0.79	0.79	0.00	0.00	0.00	0.00	2.43	0.24	0.02	0.42	0.08	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cleaning Room	86.95	87.98	0.11	1.00	15.31	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sprue Removal	15.42	10.79	0.00	0.00	5.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Core Room	0.17	0.67	0.05	8.76	311.18	7.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.41	227.42	0.00	0.00	0.00	0.00	0.00	0.00
Core Sand Transfer	16.78	16.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sand Refuse Bunker	14.87	14.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	242.62	230.04	72.95	44.82	893.84	274.03	2.89	0.25	0.02	0.43	0.08	0.04	0.01	22.41	227.42	21.37	10.44	1.63	1.81	1.38	0.00

Total HAPs 290.19