



DATE: November 20, 2007  
TO: Interested Parties / Applicant  
RE: Indy Railway Service Corporation / 097-23827-00265  
FROM: Felicia A. Robinson  
Administrator  
Certified Mail: 7007 0710 0005 3965 7357

## Notice of Decision: Approval - Effective Immediately

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

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within fifteen (15) calendar days of the receipt of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

If you have technical questions regarding the enclosed documents, please contact the Indianapolis Office of Environmental Services, Air Permits at (317) 327-2234.

Enclosures



Department of Public Works  
Office of Environmental Services

2700 Belmont Avenue  
Indianapolis, IN 46221

317-327-2234  
Fax 327-2274  
TDD 327-5186  
indygov.org/dpw



**Minor Source Operating Permit  
INDIANA DEPARTMENT OF  
ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
AND OFFICE OF ENVIRONMENTAL SERVICES**

**Indy Railway Service Corporation  
6111 West Hanna 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.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a MSOP under 326 IAC 2-6.1.

Operation Permit No.: M097-23827-00265	
Issued by:	Issuance Date: November 20, 2007
ORIGINAL SIGNED BY	
Felicia A. Robinson Administrator Office of Environmental Services	Expiration Date: November 19, 2012



Air Quality Hotline: 317-327-4AIR | [knozone.com](http://knozone.com)

**Department of Public Works  
Office of Environmental Services**

2700 Belmont Avenue  
Indianapolis, IN 46221

317-327-2234  
Fax 327-2274  
TDD 327-5186  
[indygov.org/dpw](http://indygov.org/dpw)

## TABLE OF CONTENTS

<b>A. SOURCE SUMMARY.....</b>	<b>4</b>
A.1 General Information [326 IAC 2-5.1-3(c)][326 IAC 2-6.1-4(a)]	
A.2 Emission Units and Pollution Control Equipment Summary	
<b>B. GENERAL CONDITIONS .....</b>	<b>6</b>
B.1 Definitions [326 IAC 2-1.1-1]	
B.2 Permit Term [326 IAC 2-6.1-7(a)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]	
B.3 Term of Conditions [326 IAC 2-1.1-9.5]	
B.4 Enforceability	
B.5 Severability	
B.6 Property Rights or Exclusive Privilege	
B.7 Duty to Provide Information	
B.8 Certification	
B.9 Annual Notification [326 IAC 2-6.1-5(a)(5)]	
B.10 Preventive Maintenance Plan [326 IAC 1-6-3]	
B.11 Prior Permits Superseded [326 IAC 2-1.1-9.5]	
B.12 Termination of Right to Operate [326 IAC 2-6.1-7(a)]	
B.13 Permit Renewal [326 IAC 2-6.1-7]	
B.14 Permit Amendment or Revision [326 IAC 2-5.1-3(e)(3)][326 IAC 2-6.1-6]	
B.15 Source Modification Requirement	
B.16 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)][326 IAC 2-6.1-5(a)(4)][IC 13-14-2-2] [IC 13-17-3-2][IC 13-30-3-1]	
B.17 Transfer of Ownership or Operational Control [326 IAC 2-6.1-6]	
B.18 Annual Fee Payment [326 IAC 2-1.1-7]	
B.19 Credible Evidence [326 IAC 1-1-6]	
<b>C. SOURCE OPERATION CONDITIONS .....</b>	<b>12</b>
<b>Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]</b>	
C.1 Permit Revocation [326 IAC 2-1.1-9]	
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 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]	
<b>Testing Requirements [326 IAC 2-6.1-5(a)(2)]</b>	
C.7 Performance Testing [326 IAC 3-6]	
<b>Compliance Requirements [326 IAC 2-1.1-11]</b>	
C.8 Compliance Requirements [326 IAC 2-1.1-11]	
<b>Compliance Monitoring Requirements [326 IAC 2-6.1-5(a)(2)]</b>	
C.9 Compliance Monitoring [326 IAC 2-1.1-11]	
C.10 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]	
C.11 Instrument Specifications [326 IAC 2-1.1-11]	
<b>Corrective Actions and Response Steps</b>	
C.12 Actions Related to Noncompliance Demonstrated by a Stack Test	
<b>Record Keeping and Reporting Requirements [326 IAC 2-6.1-5(a)(2)]</b>	
C.13 Malfunctions Report [326 IAC 1-6-2]	

- C.14 General Record Keeping Requirements [326 IAC 2-6.1-5]
- C.15 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2]  
[IC 13-14-1-13]

**D.1. EMISSIONS UNIT OPERATION CONDITIONS..... 18**

**Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]**

- D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-9]
- D.1.2 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3]
- D.1.3 Permit Review Rules: General Provisions [326 IAC 2-1.1]
- D.1.4 Preventive Maintenance Plan [326 IAC 1-6-3]

**Compliance Determination Requirements**

- D.1.5 Volatile Organic Compounds (VOC) [326 IAC 8-1-2] [326 IAC 8-1-4]

**Record Keeping and Reporting Requirements [326 IAC 2-6.1-5(a)(2)]**

- D.1.6 Record Keeping Requirement

**D.2 EMISSIONS UNIT OPERATION CONDITIONS..... 20**

**Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]**

- D.2.1 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3]

**D.3 EMISSIONS UNIT OPERATION CONDITIONS..... 21**

**Annual Notification ..... 22**

**Malfunction Report ..... 23**

## 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 Office of Environmental Services (OES). The information describing the source contained in conditions A.1 and A.2 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 2-5.1-3(c)][326 IAC 2-6.1-4(a)]

---

The Permittee owns and operates a stationary welding, cleaning and painting facility for railcars.

Source Address:	6111 West Hanna Avenue, Indianapolis, Indiana 46241
Mailing Address:	P.O. Box 42331, Indianapolis, IN 46242
General Source Phone Number:	(317) 856-3708
SIC Code:	4789
County Location:	Marion
Source Location Status:	Nonattainment for PM 2.5 standard Attainment for all other criteria pollutants
Source Status:	Minor Source Operating Permit Program Minor Source, under PSD and Nonattainment New Source Review Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

### A.2 Emission Units and Pollution Control Equipment Summary

---

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

- (a) One (1) spray painting operation, utilizing two (2) airless spray guns, identified as Emission Unit ID Spray Painting. Maximum capacity rated at 547.5 rail cars painted per year or 1.5625 gallons of coating applied per hour. This includes the use of cleanup solvents at a maximum usage of 1150 gallons per year, and a maximum cleanup solvent density of 7.2 pounds of VOC/gallon. Emission Unit ID Spray Painting exhausts at two (2) stacks, identified as SV<sub>1</sub> and SV<sub>2</sub>.
- (b) One (1) air discharged pneumatic abrasive blasting operation identified as Emission Unit ID Abrasive Blasting. Abrasive blasting operations occur inside a building with the doors closed and exhaust vents, AB<sub>1</sub> and AB<sub>2</sub>, directed into water tubs to minimize PM emissions. The use of water tubs is not necessary to comply with 326 IAC 6-3. The maximum capacity of Emission Unit ID Abrasive Blasting is 1.5 railcars abrasively blasted per day. Emission Unit ID Abrasive Blasting was installed in 1980.
- (c) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million BTU per hour:
  - (1) Eight (8) natural gas fired heaters;
    - (A) seven (7) each rated at 150,000 Btu per hour.
    - (B) one (1) rated at 563,000 Btu per hour.
- (d) 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.

- (1) Three (3) fuel-fired heaters;
  - (A) two (2) each rated at 230,000 Btu per hour.
  - (B) one (1) rated at 155,000 Btu per hour.
  
- (e) The following equipment related to manufacturing activities not resulting in the emission of HAPs: welding equipment and cutting torches.

## **SECTION B GENERAL CONDITIONS**

### **B.1 Definitions [326 IAC 2-1.1-1]**

---

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 2-1.1-1) shall prevail.

### **B.2 Permit Term [326 IAC 2-6.1-7(a)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]**

---

- (a) This permit, M097-23827-00265, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
- (b) If IDEM, OAQ and OES, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, until the renewal permit has been issued or denied.

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

---

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

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

### **B.4 Enforceability**

---

- (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 and 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 OES.

### **B.5 Severability**

---

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**

---

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

### **B.7 Duty to Provide Information**

---

- (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 an "authorized individual" as defined by 326 IAC 2-1.1-1(1). 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

---

- (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 an "authorized individual" of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.
- (c) An "authorized individual" is defined at 326 IAC 2-1.1-1(1).

#### B.9 Annual Notification [326 IAC 2-6.1-5(a)(5)]

---

- (a) An annual notification shall be submitted by an authorized individual to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.
- (b) The annual notice shall be submitted in the format attached no later than March 1 of each year to:

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

and

Indianapolis Office of Environmental Services  
Air Compliance  
2700 South Belmont Avenue  
Indianapolis, Indiana 46221

- (c) The notification 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.

#### B.10 Preventive Maintenance Plan [326 IAC 1-6-3]

---

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

- (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

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

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

and

Indianapolis Office of Environmental Services  
Air Compliance  
2700 South Belmont Avenue  
Indianapolis, Indiana 46221

The PMP extension notification does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) 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 PMPs do not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

#### B.11 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of permits established prior to M097-23827-00265 and issued pursuant to permitting programs approved into the state implementation plan have been either:
  - (1) incorporated as originally stated,
  - (2) revised, or
  - (3) deleted.
- (b) All previous registrations and permits are superseded by this permit.

#### B.12 Termination of Right to Operate [326 IAC 2-6.1-7(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 ninety (90) days prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-6.1-7.

#### B.13 Permit Renewal [326 IAC 2-6.1-7]

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and OES and shall include the information specified in

326 IAC 2-6.1-7. Such information shall be included in the application for each emission unit at this source. The renewal application does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

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

and

Indianapolis Office of Environmental Services  
Air Permits  
2700 South Belmont Avenue  
Indianapolis, Indiana 46221

- (b) A timely renewal application is one that is:
- (1) Submitted at least ninety (90) days prior to the date of the expiration of this permit; and
  - (2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ and OES on or before the date it is due.
- (c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-6.1 until IDEM, OAQ and 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 OES any additional information identified as being needed to process the application.

B.14 Permit Amendment or Revision [326 IAC 2-5.1-3(e)(3)][326 IAC 2-6.1-6]

- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

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

and

Indianapolis Office of Environmental Services  
Air Permits  
2700 South Belmont Avenue  
Indianapolis, Indiana 46221

Any such application shall be certified by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) The Permittee shall notify the OAQ within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

**B.15 Source Modification Requirement**

---

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

**B.16 Inspection and Entry**

---

[326 IAC 2-5.1-3(e)(4)(B)][326 IAC 2-6.1-5(a)(4)][IC 13-14-2-2][IC 13-17-3-2][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, U.S. EPA, and OES or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a permitted 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, at reasonable times, 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, at reasonable times, 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, at reasonable times, 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.17 Transfer of Ownership or Operational Control [326 IAC 2-6.1-6]**

---

- (a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

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

and

Indianapolis Office of Environmental Services  
Air Permits  
2700 South Belmont Avenue  
Indianapolis, Indiana 46221

The application which shall be submitted by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) The Permittee may implement notice-only changes addressed in the request for a notice-only change immediately upon submittal of the request. [326 IAC 2-6.1-6(d)(3)]

**B.18 Annual Fee Payment [326 IAC 2-1.1-7]**

---

- (a) The Permittee shall pay annual fees to IDEM, OAQ and OES within thirty (30) calendar days of receipt of a billing.
- (b) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

**B.19 Credible Evidence [326 IAC 1-1-6]**

---

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

## SECTION C SOURCE OPERATION CONDITIONS

Entire Source

### Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]

#### C.1 Permit Revocation [326 IAC 2-1.1-9]

Pursuant to 326 IAC 2-1.1-9 (Revocation of Permits), this permit to operate may be revoked for any of the following causes:

- (a) Violation of any conditions of this permit.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM and OES, the fact that continuance of this permit is not consistent with purposes of this article.

#### 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.

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

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

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

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

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

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

All required notifications shall be submitted to:

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

and

Indianapolis Office of Environmental Services  
Asbestos Section  
2700 South Belmont Avenue  
Indianapolis, Indiana 46221

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 an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (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 2-6.1-5(a)(2)]**

#### **C.7 Performance Testing [326 IAC 3-6]**

---

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

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

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

and

Indianapolis Office of Environmental Services  
Air Compliance  
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 an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (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 an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ and OES not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ and OES if the Permittee submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

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

#### **C.8 Compliance Requirements [326 IAC 2-1.1-11]**

---

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 2-6.1-5(a)(2)]**

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

---

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

#### **C.10 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.11 Instrument Specifications [326 IAC 2-1.1-11]**

---

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

### **Corrective Actions and Response Steps**

#### **C.12 Actions Related to Noncompliance Demonstrated by a Stack Test**

---

- (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 and OES, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

### **Record Keeping and Reporting Requirements [326 IAC 2-6.1-5(a)(2)]**

#### **C.13 Malfunctions Report [326 IAC 1-6-2]**

---

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations

or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) and OES or appointed representative upon request.

- (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ and OES, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.
- (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).
- (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.14 General Record Keeping Requirements [326 IAC 2-6.1-5]

- (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.15 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

- (a) Reports required by conditions in Section D of this permit shall be submitted to:

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

and

Indianapolis Office of Environmental Services  
Air Compliance  
2700 South Belmont Avenue  
Indianapolis, Indiana 46221

- (b) 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.

- (c) 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 an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
  
- (d) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

## SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

### Emissions Unit Description:

- (a) One (1) spray painting operation, utilizing two (2) airless spray guns, identified as Emission Unit ID Spray Painting. Maximum capacity rated at 547.5 rail cars per year or 1.5625 gallons of coating applied per hour. This includes the use of cleanup solvents at a maximum usage of 1150 gallons per year, and a maximum cleanup solvent density of 7.2 pounds of VOC/gallon. Emission Unit ID Spray Painting exhausts at two (2) stacks, identified as SV<sub>1</sub> and SV<sub>2</sub>.

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

### Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]

#### D.1.1 Volatile Organic Compound (VOC) Content Limitations [326 IAC 8-2-9]

- (a) Pursuant to 326 IAC 8-2-9, the volatile organic compound (VOC) content of the coating(s) delivered to the applicator at Emission Unit ID Spray Painting shall be limited to 3.5 pounds of VOC per gallon of coating less water, for air dried or forced warm air dried coatings.
- (b) Solvent sprayed from application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

#### D.1.2 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3]

Pursuant to 326 IAC 6-3-2(d)(Particulate Emission Limitations for Manufacturing Processes), Emission Unit ID Spray Painting is subject to the following:

- (a) Particulate from the surface coating process shall be controlled by a dry particulate filter, waterwash, or an equivalent control device, and the Permittee shall operate the control device in accordance with manufacturer's specifications.
- (b) If overspray is visibly detected at the exhaust or accumulates on the ground, the Permittee shall inspect the control device and do either of the following no later than four (4) hours after such observation:
- (1) Repair control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.
  - (2) Operate equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground.
- (c) If overspray is visibly detected, the Permittee shall maintain a record of the action taken as a result of the inspection, any repairs of the control device, or change in operations, so that overspray is not visibly detected at the exhaust or accumulates on the ground. These records must be maintained for five (5) years.

#### D.1.3 Permit Review Rules: General Provisions [326 IAC 2-1.1]

Pursuant to 326 IAC 2-1.1 (Permit Review Rules: General Provisions), any change or modification to Emission Unit ID Spray Painting that would increase the potential to emit of any single HAP to equal to or greater than ten (10) tons per year or a combination of HAP to equal to or greater than twenty five (25) tons per year shall require prior approval from IDEM, OAQ and OES before such change can occur.

D.1.4 Preventive Maintenance Plan [326 IAC 1-6-3]

---

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for Emission Unit ID Spray Painting and its control device.

**Compliance Determination Requirements**

D.1.5 Volatile Organic Compounds (VOC) [326 IAC 8-1-2] [326 IAC 8-1-4]

---

Compliance with the VOC content contained in condition D.1.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) by preparing or obtaining from the manufacturer the copies of the "as supplied" and "as applied" VOC data sheets. IDEM, OAQ, and OES, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

**Record Keeping Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]**

D.1.6 Record Keeping Requirements

---

- (a) To document compliance with condition D.1.1, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken as stated below and shall be complete and sufficient to establish compliance with the VOC limit established in condition D.1.1.
- (1) The VOC content of each coating material and solvent used less water.
  - (2) The amount of coating material and solvent used on a monthly basis.
    - (A) Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.
    - (B) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
  - (3) The monthly cleanup solvent usage; and
  - (4) The total VOC usage for each month.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

## SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

### Emissions Unit Description:

- (b) One (1) air discharged pneumatic abrasive blasting operation identified as Emission Unit ID Abrasive Blasting. Abrasive blasting operations occur inside a building with the doors closed and exhaust vents, AB<sub>1</sub> and AB<sub>2</sub>, directed into water tubs to minimize PM emissions. The use of water tubs is not necessary to comply with 326 IAC 6-3. The maximum capacity of Emission Unit ID Abrasive Blasting is 1.5 railcars abrasively blasted per day. Emission Unit ID Abrasive Blasting was installed in 1980.

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

### Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]

#### D.2.1 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from Emission Unit ID Abrasive Blasting shall not exceed 6.52 pounds per hour when operating at a process weight rate of (two) 2 tons per hour.

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

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

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour and  
P = process weight rate in tons per hour

### SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

#### Emissions Unit Description:

- (c) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million BTU per hour:
  - (1) Eight (8) natural gas fired heaters;
    - (A) seven (7) each rated at 150,000 Btu per hour.
    - (B) one (1) rated at 563,000 Btu per hour.
- (d) 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.
  - (1) Three (3) fuel-fired heaters;
    - (A) two (2) each rated at 230,000 Btu per hour.
    - (B) one (1) rated at 155,000 Btu per hour.
- (e) The following equipment related to manufacturing activities not resulting in the emission of HAPs: welding equipment and cutting torches.

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

#### Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]

There are no applicable requirements included for these emission units.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE BRANCH  
and OES**

**MINOR SOURCE OPERATING PERMIT  
ANNUAL NOTIFICATION**

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

<b>Company Name:</b>	Indy Railway Service Corporation
<b>Address:</b>	6111 West Hanna Avenue
<b>City:</b>	Indianapolis, Indiana 46241
<b>Phone #:</b>	(317) 856-3708
<b>MSOP #:</b>	M097-23827-00265

I hereby certify that Indy Railway Service Corporation is :  still in operation.  
 no longer in operation.

I hereby certify that Indy Railway Service Corporation is :  in compliance with the requirements of MSOP M097-23827-00265.  
 not in compliance with the requirements of MSOP M097-23827-00265.

<b>Authorized Individual (typed):</b>
<b>Title:</b>
<b>Signature:</b>
<b>Date:</b>

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

<b>Noncompliance:</b>

**MALFUNCTION REPORT**  
**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**  
**OFFICE OF AIR QUALITY**  
**FAX NUMBER - 317 233-6865**  
**and**  
**INDIANAPOLIS OES**  
**Air Compliance**  
**FAX NUMBER – 317-327-2274**

**This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6  
and to qualify for the exemption under 326 IAC 1-6-4.**

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER ?\_\_\_\_\_, 25 TONS/YEAR SULFUR DIOXIDE ?\_\_\_\_\_, 25 TONS/YEAR NITROGEN OXIDES?\_\_\_\_\_, 25 TONS/YEAR VOC ?\_\_\_\_\_, 25 TONS/YEAR HYDROGEN SULFIDE ?\_\_\_\_\_, 25 TONS/YEAR TOTAL REDUCED SULFUR ?\_\_\_\_\_, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS ?\_\_\_\_\_, 25 TONS/YEAR FLUORIDES ?\_\_\_\_\_, 100TONS/YEAR CARBON MONOXIDE ?\_\_\_\_\_, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT ?\_\_\_\_\_, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT ?\_\_\_\_\_, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD ?\_\_\_\_\_, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2) ?\_\_\_\_\_. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION \_\_\_\_\_.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC \_\_\_\_\_ OR, PERMIT CONDITION # \_\_\_\_\_ AND/OR PERMIT LIMIT OF \_\_\_\_\_

THIS INCIDENT MEETS THE DEFINITION OF >MALFUNCTION= AS LISTED ON REVERSE SIDE ? Y N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ? Y N

COMPANY: \_\_\_\_\_ PHONE NO. ( ) \_\_\_\_\_

LOCATION: (CITY AND COUNTY) \_\_\_\_\_

PERMIT NO. \_\_\_\_\_ AFS PLANT ID: \_\_\_\_\_ AFS POINT ID: \_\_\_\_\_ INSP: \_\_\_\_\_

CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON: \_\_\_\_\_

DATE/TIME MALFUNCTION STARTED: \_\_\_\_/\_\_\_\_/20\_\_\_\_ \_\_\_\_\_ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: \_\_\_\_\_

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE \_\_\_\_/\_\_\_\_/20\_\_\_\_ \_\_\_\_\_ AM/PM

TYPE OF POLLUTANTS EMITTED: TSP, PM10, SO<sub>2</sub>, VOC, OTHER: \_\_\_\_\_

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: \_\_\_\_\_

MEASURES TAKEN TO MINIMIZE EMISSIONS: \_\_\_\_\_

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL\* SERVICES: \_\_\_\_\_

CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS: \_\_\_\_\_

CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT: \_\_\_\_\_

INTERIM CONTROL MEASURES: (IF APPLICABLE) \_\_\_\_\_

MALFUNCTION REPORTED BY: \_\_\_\_\_ TITLE: \_\_\_\_\_  
(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY: \_\_\_\_\_ DATE: \_\_\_\_\_ TIME: \_\_\_\_\_

\*SEE PAGE 2

**Please note - This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.**

**326 IAC 1-6-1 Applicability of rule**

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

**326 IAC 1-2-39 "Malfunction" definition**

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

**\*Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

---

---

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

Addendum to the Technical Support Document  
for the Transition from a  
Federally Enforceable State Operating Permit (FESOP) to a  
Minor Source Operating Permit (MSOP)

<b>Source Name:</b>	<b>Indy Railway Service Corporation</b>
<b>Source Location:</b>	<b>6111 West Hanna Avenue, Indianapolis, Indiana 46241</b>
<b>County:</b>	<b>Marion</b>
<b>SIC Code:</b>	<b>4789</b>
<b>Permit No.:</b>	<b>M097-23827-00265</b>
<b>Permit Reviewer:</b>	<b>M. Caraher</b>

On October 17, 2007, 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 Indy Railway Service Corporation had submitted an application for the transition from a Federally Enforceable State Operating Permit (FESOP) to a Minor Source Operating Permit (MSOP). Indy Railway Service Corporation operates a welding, cleaning and painting facility for railroad cars. 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 thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

No comments were received on the draft MSOP during the public notice period. However, upon further review, OAQ and OES have decided to make the following revisions to the MSOP. The TSD will remain as it originally appeared when published. Changes to the permit or technical support material that occur after the permit has published for public notice 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 strikethrough has been deleted.

The revisions to the MSOP are as follows:

**Change # 1**

Volatile organic compounds (VOC) and nitrogen oxides (NO<sub>x</sub>) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO<sub>x</sub> emissions are considered when evaluating the rule applicability relating to the ozone. On November 8, 2007, a temporary emergency rule took effect redesignating Marion County to attainment for the eight-hour ozone standard. The Indiana Air Pollution Control Board has begun the process for a permanent rule revision to incorporate these changes into 326 IAC 1-4-1. The permanent revision to 326 IAC 1-4-1 should take effect prior to the expiration of the emergency rule.

Marion County has been designated as nonattainment for PM2.5. According to an EPA guidance memo dated April 5, 2005, PM10 is to be utilized as a surrogate for PM2.5 until the EPA can promulgate the PM2.5 implementation rule. PM10 emissions, and therefore, PM2.5 emissions from this source are less than one hundred (100) tons per twelve consecutive month period. There have been no modifications to this source such that it is a major source of PM10 emissions. Therefore, this source is not subject to nonattainment new source review requirements for PM2.5 emissions.

Minor source status under nonattainment new source review for PM2.5 is added to Condition A.1 and the redesignation to attainment for the eight-hour ozone standard causes the following changes to Condition A.1:

A.1 General Information [326 IAC 2-5.1-3(c)][326 IAC 2-6.1-4(a)]

The Permittee owns and operates a stationary welding, cleaning and painting facility for railcars.

Source Address:	6111 West Hanna Avenue, Indianapolis, Indiana 46241
Mailing Address:	P.O. Box 42331, Indianapolis, IN 46242
General Source Phone Number:	(317) 856-3708
SIC Code:	4789
County Location:	Marion
Source Location Status:	<del>Nonattainment for 8-hour ozone standard</del> Nonattainment for PM 2.5 standard Attainment for all other criteria pollutants
Source Status:	Minor Source Operating Permit Program Minor Source, under PSD and <b>Nonattainment New Source Review</b> <del>Emission Offset Rules</del> Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

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

Technical Support Document (TSD) for the  
Transition from a Federally Enforceable State Operating Permit (FESOP) to a  
Minor Source Operating Permit (MSOP)

### Source Background and Description

<b>Source Name:</b>	<b>Indy Railway Service Corporation</b>
<b>Source Location:</b>	<b>6111 West Hanna Avenue, Indianapolis, Indiana 46241</b>
<b>County:</b>	<b>Marion</b>
<b>SIC Code:</b>	<b>4789</b>
<b>Operation Permit No.:</b>	<b>F097-12273-00265</b>
<b>Operation Permit Issuance Date:</b>	<b>June 27, 2002</b>
<b>Permit No.:</b>	<b>M097-23827-00265</b>
<b>Permit Reviewer:</b>	<b>M. Caraher</b>

The Indiana Department of Environmental Management (IDEM) Office of Air Quality (OAQ) and the City of Indianapolis Office of Environmental Services (OES) have reviewed a transition application from a FESOP to a Minor Source Operating Permit (MSOP) from Indy Railway Service Corporation relating to the operation of a welding, cleaning and painting facility for railroad cars.

### History

Indy Railway Service Corporation was issued a FESOP Renewal, F097-12273-00265, on June 27, 2002. On October 27, 2006, Indy Railway Service Corporation submitted an application to OAQ and OES requesting to renew its operating permit.

Based on the re-evaluation of the potential to emit of Xylene from Emission Unit ID Spray Painting, this source is no longer a major source for single and combined HAP emissions (see Appendix A page 10 of 10). As a result, this source no longer requires a FESOP in order to limit the potential to emit single and combined HAP emissions such that 326 IAC 2-7 (Part 70 Permit Program) does not otherwise apply. Indy Railway Service Corporation submitted the transition application from a FESOP to a Minor Source Operating Permit (MSOP) on August 13, 2007.

### Permitted Emission Units and Pollution Control Equipment

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

- (a) One (1) spray painting operation, utilizing two (2) airless spray guns, identified as Emission Unit ID Spray Painting. Maximum capacity rated at 547.5 rail cars painted per year or 1.5625 gallons of coating applied per hour. This includes the use of cleanup solvents at a maximum usage of 1150 gallons per year, and a maximum cleanup solvent density of 7.2 pounds of VOC/gallon. Emission Unit ID Spray Painting exhausts at two (2) stacks, identified as SV<sub>1</sub> and SV<sub>2</sub>.
- (b) One (1) air discharged pneumatic abrasive blasting operation identified as Emission Unit ID Abrasive Blasting. Abrasive blasting operations occur inside a building with the doors closed and exhaust vents, AB<sub>1</sub> and AB<sub>2</sub>, directed into water tubs to minimize PM emissions. The use of water tubs is not necessary to comply with 326 IAC 6-3. The

maximum capacity of Emission Unit ID Abrasive Blasting is 1.5 railcars abrasively blasted per day. Emission Unit ID Abrasive Blasting was installed in 1980.

- (c) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million BTU per hour:
  - (1) Eight (8) natural gas fired heaters;
    - (A) seven (7) each rated at 150,000 Btu per hour.
    - (B) one (1) rated at 563,000 Btu per hour.
- (d) 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.
  - (1) Three (3) fuel-fired heaters;
    - (A) two (2) each rated at 230,000 Btu per hour.
    - (B) one (1) rated at 155,000 Btu per hour.
- (e) The following equipment related to manufacturing activities not resulting in the emission of HAPs: welding equipment and cutting torches.

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

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

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

No emission units or pollution control equipment has been removed from the source during this review process.

#### **Existing Approvals**

The source has been operating under FESOP Renewal, F097-12273-00265, issued on June 27, 2002, with an expiration date of June 27, 2007, and the following amendments and revisions:

- (a) Administrative Amendment F097-18814-00265 issued on September 8, 2004.

All conditions from previous approvals were incorporated into this MSOP except the following:

- (a) Condition D.1.1 of F097-12273-00265 issued on June 27, 2002:

##### **D.1.1 Hazardous Air Pollutants (HAPs) [326 IAC 2-8-4(1)]**

---

Hazardous air pollutant emissions shall be limited as follows:

- (a) The amount of any hazardous air pollutant (HAP) delivered to the applicators plus the amount used for clean-up shall not exceed 9 tons per rolling twelve consecutive month period.
- (b) Any combination of hazardous air pollutant (HAPs) delivered to the applicators plus the amount used for clean-up shall not exceed 24 tons per rolling twelve consecutive month period.

Reason not incorporated: The potential to emit regulated air pollutants from Emission Unit ID Spray Painting in FESOP Renewal, F097-12273-00265, was determined using coatings that were non-compliant with 326 IAC 8-2-9 (Miscellaneous Metal Coating). Xylene, a single hazardous air pollutant (HAP) and a VOC, is a component of the non-compliant coatings previously utilized in Emission Unit ID Spray Painting. The potential to emit of Xylene from this source in FESOP Renewal, F097-12273-00265, was determined to be equal to or greater than ten (10) tons per year. The potential to emit of Xylene from this source is no longer equal to or greater than ten (10) tons per year (see Appendix A page 10 of 10). Therefore, this source is no longer a major HAP source. As a result, neither any single HAP emissions nor any combination of HAP emissions need to be limited such that 326 IAC 2-7 (Part 70 Permit Program) does not apply. Therefore, Condition D.1.1 (Hazardous Air Pollutants) is not incorporated.

(b) Condition D.1.2 of F097-12273-00265 issued on June 27, 2002:

#### D.1.2 Particulate Emission Limitations [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the use of two (2) airless spray guns shall be limited by the following:

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

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

Reason not incorporated: The 326 IAC 6-3 revisions that became effective on June 12, 2002 were approved into the State Implementation Plan (SIP) on September 23, 2005. The revised rule replaces the previous version of 326 IAC 6-3 (Process Operations). Therefore, the requirements of the previous version of 326 IAC 6-3 are no longer applicable. In the revised rule, surface coating operations that use five (5) gallons of coating(s) per day or more are subject to the provisions of 326 IAC 6-3-2(d) (Particulate Emission Limitations for Manufacturing Processes) (see Appendix A page 1 of 10). 326 IAC 6-3-2(d) requires the use of control devices but does not expressly state an hourly allowable particulate emission rate based on the process rate (see State Rule Applicability – Individual Facilities section). Therefore, Condition D.1.2 (Particulate Emission Limitations) is no longer an applicable requirement and is replaced by the applicable requirements stated in 326 IAC 6-3-2(d) (Particulate Emission Limitations for Manufacturing Processes).

#### **Enforcement Issue**

There are no enforcement actions pending.

#### **Recommendation**

The staff recommends to the Administrator that the Minor Source Operating Permit (MSOP) 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 FESOP Renewal application for the purposes of this review was received by OES and IDEM, OAQ on October 27, 2006. Additional information was received by OES on February 20, 2007, on March 30, 2007, on May 2, 2007, and on September 4, 2007. The transition application from a FESOP Renewal to a Minor Source Operating Permit (MSOP) was received on August 13, 2007.

There was no notice of completeness letter mailed to the source.

## Emission Calculations

See Appendix A (pages 1 through 10) of this document for detailed emission calculations.

## Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

Pollutant	Unrestricted Potential Emissions (tons/yr)
PM	38.13
PM10	38.15
SO <sub>2</sub>	1.37
VOC	28.17
CO	0.59
NO <sub>x</sub>	1.09

HAPs	Unrestricted Potential Emissions (tons/yr)
Xylene	9.26
Total	12.72

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM, PM10, SO<sub>2</sub>, VOC, CO and NO<sub>x</sub> are each less than 100 tons per year. The potential to emit PM, PM10 and VOC are each greater than 25 tons per year. Therefore, the source is subject to the provisions of 326 2-6.1 (Minor Source Operating Permit Program). Pursuant to 326 IAC 2-6.1, a Minor Source Operating Permit (MSOP) will be issued.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7. The source will be issued a MSOP because the potential to emit PM, PM10 and VOC are each greater than twenty-five (25) tons per year but less than one-hundred (100) tons per year.
- (c) Fugitive Emissions  
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

### Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
SV <sub>1</sub>	Emission Unit ID Spray Painting	7.5	2.0	1570	ambient
SV <sub>2</sub>	Emission Unit ID Spray Painting	8.0	4.0	8790	ambient
AB <sub>1</sub>	Emission Unit ID Abrasive Blasting	7.0	2.0	1570	ambient
AB <sub>2</sub>	Emission Unit ID Abrasive Blasting	7.0	2.0	1570	ambient

### Potential to Emit After Issuance

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

Emission unit / Process	Potential To Emit (tons/year)						
	PM	PM10	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	Single HAP / Combined HAP
Emission Unit ID Spray Painting	15.36	15.36	0.00	28.12	0.00	0.00	9.26 / 12.69
Emission Unit ID Abrasive Blasting	19.42	19.42	0.00	0.00	0.00	0.00	0.00 / 0.00
Eight (8) natural gas fired heaters; Three (3) fuel-fired heaters; Welding equipment and cutting torches	3.34	3.36	1.37	0.05	0.59	1.09	0.01 / 0.02
<b>Total Emissions</b>	<b>38.13</b>	<b>38.15</b>	<b>1.37</b>	<b>28.17</b>	<b>0.59</b>	<b>1.09</b>	<b>9.26 / 12.72</b>

### County Attainment Status

The source is located in Marion County.

Pollutant	Status
PM2.5	nonattainment
PM10	attainment
SO <sub>2</sub>	maintenance attainment
NO <sub>x</sub>	attainment
8-hour Ozone	basic nonattainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and Nitrogen Oxides (NO<sub>x</sub>) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO<sub>x</sub> emissions are considered when evaluating the rule applicability relating to the ozone standards. Marion County has been designated as nonattainment for the 8-hour ozone standard. Therefore,

VOC and NO<sub>x</sub> emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.

- (b) Marion County has been classified as nonattainment for PM<sub>2.5</sub> in 70 FR 943 dated January 5, 2005. Until U.S. EPA adopts specific New Source Review rules for PM<sub>2.5</sub> emissions, it has directed states to regulate PM<sub>10</sub> emissions as a surrogate for PM<sub>2.5</sub> emissions, pursuant to the Non-attainment New Source Review requirements. See the State Rule Applicability for the source section.
- (c) Marion County has been classified as attainment or unclassifiable in Indiana for PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>2</sub>, CO, and Lead. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.
- (d) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 revoking the one-hour ozone standard in Indiana.
- (e) Fugitive Emissions  
Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 or 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

### Source Status

Existing Source PSD, Part 70, or FESOP Definition (emissions after controls, based on 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/yr)
PM	38.13
PM <sub>10</sub>	38.15
SO <sub>2</sub>	1.37
VOC	28.17
CO	0.59
NO <sub>x</sub>	1.09
Highest Single HAP	9.26
Combination HAPs	12.72

- (a) This existing source is not a major stationary source, under PSD, because no attainment regulated pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories.
- (b) This existing source is not a major stationary source, under Emission Offset, because no nonattainment regulated pollutant is emitted at a rate of 100 tons per year or greater, and it is not in one of the 28 listed source categories.

### Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the MSOP for this source.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP)(326 IAC 14, 20 and 40 CFR Part 61, 63) included in the MSOP for this source.

Emission Unit ID Spray Painting is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP): Surface Coating of Miscellaneous Parts and Products 40 CFR Part 63, Subpart M and 326 IAC 20 because this source is not a major HAP source.

### **State Rule Applicability – Entire Source**

#### **326 IAC 2-1.1-5 (Non-attainment New Source Review)**

Marion County has been designated as nonattainment for PM2.5. According to an EPA guidance memo dated April 5, 2005, PM10 is to be utilized as a surrogate for PM2.5 until the EPA can promulgate the PM2.5 implementation rule. PM10 emissions, and therefore PM2.5 emissions, from this source are less than one hundred (100) tons per twelve consecutive month period. There have been no modifications to this source such that it is a major source of PM10 emissions. Therefore, this source is not subject to nonattainment new source review requirements for PM2.5 emissions.

#### **326 IAC 2-2 (Prevention of Significant Deterioration (PSD) Requirements) and 326 IAC 2-3 (Emission Offset)**

This source is not a major stationary source because no attainment regulated pollutant emissions are equal to or greater than two hundred fifty (250) tons per year, this source is not one of the 28 listed source categories under 326 IAC 2-2 or 326 IAC 2-3 and no nonattainment regulated pollutant emissions are equal to or greater than one hundred (100) tons per year. There have been no modifications or revisions to this source that were major modifications pursuant to 326 IAC 2-2 or 326 IAC 2-3. Therefore, 326 IAC 2-2 (Prevention of Significant Deterioration (PSD) Requirements) and 326 IAC 2-3 (Emission Offset) are each not applicable to the source.

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

The operation of this welding, cleaning and painting facility for railroad cars will emit less than 10 tons per year of a single HAP or 25 tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply to this source.

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

Pursuant to 326 IAC 2-6-1(a)(1), (2), and (3), this source is not subject to 326 IAC 2-6 (Emission Reporting) because, as a MSOP, it is not required to have an operating permit under 326 IAC 2-7, it does not emit lead into the ambient air at levels equal to or greater than five (5) tons per year, and it is not located in Lake or Porter Counties. Therefore, this source is not subject to 326 IAC 2-6 (Emission Reporting).

#### **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 the 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.

#### **326 IAC 6-4 (Fugitive Dust Emissions)**

This source is subject to the provisions of 326 IAC 6-4 for fugitive dust emissions. 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 6.5-1-2 (Particulate Matter Limitations Except Lake County) and 326 IAC 6.5-6 (Marion County)

This source has the potential to emit particulate of less than one hundred (100) tons per year and has actual emissions less than ten (10) tons per year (see Appendix A pages 1, 4 and 10). Indy Railway Service Corporation is not specifically identified in 326 IAC 6.5-6 (Marion County). Therefore, 326 IAC 6.5-1-2 (Particulate Matter Limitations Except Lake County) and 326 IAC 6.5-6 (Marion County) do not apply to this source.

326 IAC 8-1-6 (General Volatile Organic Compound Reduction Requirements)

This source commenced construction and operation prior to January 1, 1980. This source has no specific emission unit that has the potential to emit twenty five (25) tons per year or more of volatile organic compounds (VOC) and which are not otherwise regulated by other provisions of 326 IAC 8 (Volatile Organic Compound Rules) (see State Rule Applicability – Individual Facilities section). Therefore, this source is not subject to 326 IAC 8-1-6 (General Provisions Relating to VOC Rules: General Reduction Requirements for New Facilities).

326 IAC 11 (Emission Limitations for Specific Types of Operations)

This welding, cleaning and painting facility for railroad cars does not perform any specific type of operation identified in 326 IAC 11 (Emission Limitations for Specific Types of Operations). Therefore, this source is not subject to 326 IAC 11 (Emission Limitations for Specific Types of Operations).

326 IAC 12 (New Source Performance Standards)

See discussion under Federal Rule Applicability – Entire Source section of this Technical Support Document.

326 IAC 14 (Emission Standards for Hazardous Air Pollutants)

There are no provisions under 326 IAC 14 (Emission Standards for Hazardous Air Pollutants) and 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants) applicable to any specific emission unit or operation at this source. Therefore, this source is not subject to the provisions of 326 IAC 14 (Emission Standards for Hazardous Air Pollutants) and 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants).

326 IAC 20 (Hazardous Air Pollutants)

This source is not a major source of hazardous air pollutants (HAP) and does not perform operations specifically identified in 326 IAC 20. Therefore, this source is not subject to 326 IAC 20 (Hazardous Air Pollutants) and 40 CFR Part 63 (National Emission Standards for Hazardous Air Pollutants).

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

### **Emission Unit ID Spray Painting**

326 IAC 2-1.1 (Permit Review Rules: General Provisions)

The potential to emit regulated air pollutants from Emission Unit ID Spray Painting in FESOP Renewal, F097-12273-00265, was determined using coatings that were non-compliant with 326 IAC 8-2-9 (Miscellaneous Metal Coating). Xylene, a single hazardous air pollutant (HAP) and a VOC, is a component of the non-compliant coatings previously utilized in Emission Unit ID Spray Painting. The potential to emit of Xylene from this source in FESOP Renewal, F097-12273-00265, was determined to be equal to or greater than ten (10) tons per year. Emission Unit ID Spray Painting has actual VOC emissions greater than fifteen (15) pounds per day (see Appendix A page 1 of 10) from surface coating miscellaneous metal parts. Therefore, pursuant to 326 IAC

8-2-9 (Miscellaneous Metal Coating Operations), the volatile organic compound (VOC) content of the coating delivered to the applicator at Emission Unit ID Spray Painting shall be limited to 3.5 pounds of VOC per gallon of coating less water, for air dried or forced warm air dried coatings.

Xylene, a single hazardous air pollutant (HAP) and a VOC, is a component of the compliant coatings utilized in Emission Unit ID Spray Painting. Based on the re-evaluation of the potential to emit of Xylene from Emission Unit ID Spray Painting (see Appendix A page 10 of 10), this source is no longer a major source for single and combined HAP emissions. As a result, neither any single HAP emissions nor any combination of HAP emissions need to be limited such that 326 IAC 2-7 (Part 70 Permit Program) does not apply. However, pursuant to 326 IAC 2-1.1 (Permit Review Rules: General Provisions), any change or modification to Emission Unit ID Spray Painting that would increase the potential to emit of any single HAP to equal to or greater than ten (10) tons per year or a combination of HAP to equal to or greater than twenty five (25) tons per year shall require prior approval from IDEM, OAQ and OES before such change can occur.

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

Emission Unit ID Spray Painting uses greater than five (5) gallons of coating(s) per day (see Appendix A page 1 of 10). Therefore, pursuant to 326 IAC 6-3-2(d)(Particulate Emission Limitations for Manufacturing Processes), Emission Unit ID Spray Painting is subject to the following:

- (a) Particulate from the surface coating process shall be controlled by a dry particulate filter, waterwash, or an equivalent control device, and the Permittee shall operate the control device in accordance with manufacturer's specifications.
- (b) If overspray is visibly detected at the exhaust or accumulates on the ground, the Permittee shall inspect the control device and do either of the following no later than four (4) hours after such observation:
  - (1) Repair control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.
  - (2) Operate equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground.
- (c) If overspray is visibly detected, the Permittee shall maintain a record of the action taken as a result of the inspection, any repairs of the control device, or change in operations, so that overspray is not visibly detected at the exhaust or accumulates on the ground. These records must be maintained for five (5) years.

**326 IAC 8-2-9 (Miscellaneous Metal Coating)**

The one (1) spray painting operation, identified as Emission Unit ID Spray Painting, has actual VOC emissions greater than fifteen (15) pounds per day (see Appendix A page 1 of 10) from surface coating miscellaneous metal parts. Therefore, pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volatile organic compound (VOC) content of the coating delivered to the applicator at Emission Unit ID Spray Painting shall be limited to 3.5 pounds of VOC per gallon of coating less water, for air dried or forced warm air dried coatings.

Solvent sprayed from application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

Based on the MSDS' submitted by the source and the calculations made (see Appendix A page 1 of 10), Emission Unit ID Spray Painting is in compliance with this requirement.

### **Emission Unit ID Abrasive Blasting**

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

Emission Unit ID Abrasive Blasting has potential particulate emissions from the manufacturing process exceeding 0.551 pounds per hour (see Appendix A page 4 of 10). Therefore, Emission Unit ID Abrasive Blasting is subject to the provisions of 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes).

The typical weight of a railcar processed at this facility is, approximately, 64,000 pounds. The maximum process rate in Emission Unit ID Abrasive Blasting is 1.5 railcars per day (547.5 railcars painted per year / 365 days per year = 1.5 railcars per day). Therefore, the process weight in tons per hour, (P), is 2.0 tons/hour (1.5 railcars/day x one day/24 hours x 64,000 pounds/railcar x ton/2000 pounds = 2.0 tons/hour).

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from Emission Unit ID Abrasive Blasting shall not exceed 6.52 pounds per hour when operating at a process weight rate of (two) 2 tons per hour.

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

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

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

Since the uncontrolled particulate emission rate of 4.43 pounds per hour (see Appendix A page 4 of 10) is lower than the particulate emission rate allowed pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), no particulate emission control equipment is necessary to be in operation in order to comply with this limit.

### **Space Heating**

#### 326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating)

The eight (8) natural gas fired heaters and the three (3) fuel-fired heaters are each not subject to the provisions of 326 IAC 6-2 (Particulate Rules) because each heater is not an indirect heating unit. Indirect heating units are units that combust fuel to produce useable heat that is to be transferred through a heat conducting materials barrier or by a heat storage medium to a material to be heated so that the material being heated is not contracted by, and adds no substance to the products of combustion. Therefore, each of these space heating units is not subject to 326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating).

### **Welding and Cutting Torch Equipment**

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

Each welding equipment station and cutting torch station has potential particulate emissions less than 0.551 pounds per hour (see Appendix A page 9 of 10). In addition, welding operations using less than 625 pounds of rod or wire consumed per day (see Appendix A page 9 of 10) are specifically exempt from the requirements of 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes). Therefore, 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) does not apply to welding and cutting torch operations.

### **Compliance Determination and Monitoring Requirements**

Compliance with the VOC content limitation of 326 IAC 8-2-9 (Miscellaneous Metal Coating) shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) by preparing or obtaining from the manufacturer the copies of the "as supplied" and "as applied" VOC data sheets. IDEM, OAQ, and OES, reserve the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

There are no compliance monitoring requirements applicable to this source.

### **Conclusion**

The operation of this welding, cleaning and painting facility for railroad cars shall be subject to the conditions of MSOP M097-23827-00265.

**Appendix A: Emissions Calculations  
VOC and Particulate  
From Surface Coating Operations**

Company Name: **Indy Railway Service Corporation**  
 Address City IN Zip: **6111 West Hanna Avenue, Indianapolis, IN 46241**  
 Permit Number: **M097-23827-00265**  
 Pit ID: **097-00265**  
 Reviewer: **M. Caraher**  
 Date: **05/21/07**

Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	PM Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
RailTech HB Primer 2510-802	12.48	28.08%	0.0%	28.08%	0.0%	46.42%	25.00	0.0625	3.50	3.50	5.48	131.41	23.98	15.36	7.55	75%

**State Potential Emissions Worst case coating 5.48 131.41 23.98 15.36**

**METHODOLOGY 2006 Actual PM Emissions (tons/year) : 0.03**

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) \* Weight % Organics) / (1-Volume % water)

Pounds of VOC per Gallon Coating = (Density (lb/gal) \* Weight % Organics)

Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr)

Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (24 hr/day)

Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (8760 hr/yr) \* (1 ton/2000 lbs)

PM Potential Tons per Year = (units/hour) \* (gal/unit) \* (lbs/gal) \* (1- Weight % Volatiles) \* (1-Transfer efficiency) \*(8760 hrs/yr) \*(1 ton/2000 lbs)

Pounds VOC per Gallon of Solids = (Density (lbs/gal) \* Weight % organics) / (Volume % solids)

worst case VOC content coating used above

Paint 1 railcar (unit) every 16 hours/yr. Therefore, 8760 hrs/16 hours per railcar = 547.5 railcars painted/year.

Use 25 gallons per railcar (unit). Therefore, 25 gal/railcar x 1 railcar/16 hours x 8760 hours/yr = 13, 687.5 gal/yr or 1.5625 gallons per hour.

1.5625 gallons/hour / 25 gallons/unit = 0.0625 units per hour.

Transfer efficiency for airless spray guns on flat surfaces (railcars) from Air Pollution Engineering Manual (AWMA) 1992.

Paint overspray PM10 emissions = PM emissions.

Actual PM emissions estimate for 2006 with no transfer efficiency or emission control = 346 gal coat used/yr x 12.48 lbs/gal coat x (1-0.2808 wt% volatile & organics) x ton/2000 lbs = 1.55 tons PM before dry filters

Actual PM emissions estimate for 2006 after the use of dry filters at 90% efficiency, the listed transfer efficiency and operation at 8760 hours per year = 1.55 tons before filters x (1 -.75 transfer eff) x (1-0.9 contro eff) = 0.03 tons PM per year.

**Appendix A: Emission Calculations  
Surface Coating HAP Emissions**

Company Name: **Indy Railway Service Corporation**  
 Address City IN Zip: **6111 West Hanna Avenue, Indianapolis, IN 46241**  
 Permit Number: **M097-23827-00265**  
 Pit ID: **097-00265**  
 Reviewer: **M. Caraher**  
 Date: **05/21/07**

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Ethylbenzene	Weight % Xylene	Weight % Toluene	Weight % MIBK	Ethylbenzene Emissions (ton/yr)	Xylene Emissions (ton/yr)	Toluene Emissions (ton/yr)	MIBK Emissions (ton/yr)	Xylene Cleanup Emissions *	Combined HAP Emissions (ton/yr)
RailTech HB Primer 2510-802	12.48	25.00	0.0625	1.00%	6.00%	0.00%	0.00%	0.85	5.12	0.00	0.00	4.14	10.12
RailTech Satin Black 2500-106	10.01	25.00	0.0625	5.00%	5.00%	0.00%	0.00%	3.43	3.43	0.00	0.00	4.14	10.99
MoPoxy High Solids Epoxy 41-BX-1	12.50	25.00	0.0625	0.00%	0.00%	5.00%	5.00%	0.00	0.00	4.28	4.28	4.14	12.69
<b>Total State Potential to Emit, worst case coating</b>								<b>Highest Single/Combined HAP</b>	<b>3.43</b>	<b>5.12</b>	<b>4.28</b>	<b>4.28</b>	<b>12.69</b>

\* = See next page for xylene cleanup emissions. Subtract xylene cleanup emissions to obtain combined HAP emissions from surface coating only.

**METHODOLOGY**

HAPS emission rate (tons/yr) = Density (lb/gal) \* Gal of Material (gal/unit) \* Maximum (unit/hr) \* Weight % HAP \* 8760 hrs/yr \* 1 ton/2000 lbs

**Appendix A: Emission Calculations  
Cleanup VOC/HAP Emissions**

**Company Name:** Indy Railway Service Corporation  
**Address City IN Zip:** 6111 West Hanna Avenue, Indianapolis, IN 46241  
**Permit Number:** M097-23827-00265  
**Plt ID:** 097-00265  
**Reviewer:** M. Caraher  
**Date:** 05/21/07

95.83	gallons of xylene cleanup use per month, max
7.2	7.2 lbs VOC/gal xylene
690	lbs VOC emitted/month
<b>4.14</b>	tons VOC emitted/yr

95.83	gallons of xylene cleanup use per month, max
7.2	7.2 lbs HAP/gal xylene
690	lbs HAP emitted/month
<b>4.14</b>	tons HAP emitted/yr

**Notes**

Xylene used for cleanup, maximum of 1150 gal/year, based on Indy Railway Service application

**Appendix A: Emission Calculations  
Sand Blasting**

**Company Name:** Indy Railway Service Corporation  
**Address City IN Zip:** 6111 West Hanna Avenue, Indianapolis, IN 46241  
**Permit Number:** M097-23827-00265  
**Plt ID:** 097-00265  
**Reviewer:** M. Caraher  
**Date:** 05/21/07

**Table 1 - Emission Factors for Abrasives**

Abrasive	Emission Factor	
	lb PM / lb abrasive	lb PM10 / lb PM
Sand	0.041	0.70
Grit	0.010	0.70
Steel Shot	0.004	0.86
Other	0.010	1.00

**Table 2 - Density of Abrasives (lb/ft3)**

Abrasive	Density (lb/ft3)
Al oxides	160
Sand	99
Steel	487
Black Beauty	88

**Table 3 - Sand Flow Rate (FR1) Through Nozzle (lb/hr)**

Flow rate of Sand Through a Blasting Nozzle as a Function of Nozzle pressure and Internal Diameter

Internal diameter	Nozzle Pressure (psig)							
	30	40	50	60	70	80	90	100
1/8	28	35	42	49	55	63	70	77
3/16	65	80	94	107	122	135	149	165
1/4	109	138	168	195	221	255	280	309
5/16	205	247	292	354	377	420	462	507
3/8	285	355	417	477	540	600	657	720
7/16	385	472	560	645	755	820	905	940
1/2	503	615	725	835	945	1050	1160	1265
5/8	820	990	1170	1336	1510	1680	1850	2030
3/4	1140	1420	1670	1915	2160	2400	2630	2880
1	2030	2460	2900	3340	3780	4200	4640	5060

**Calculations**

*Adjusting Flow Rates for Different Abrasives and Nozzle Diameters*

Flow Rate (FR) = Abrasive flow rate (lb/hr) with internal nozzle diameter (ID)  
 FR1 = Sand flow rate (lb/hr) with internal nozzle diameter (ID1) From Table 3 =  
 D = Density of abrasive (lb/ft3) From Table 2 =  
 D1 = Density of sand (lb/ft3) =  
 ID = Actual nozzle internal diameter (in) =  
 ID1 = Nozzle internal diameter (in) from Table 3 =

507
88
99
0.31
0.31

**Flow Rate (FR) (lb/hr) = 443.485 per nozzle**

**Uncontrolled Emissions (E, lb/hr)**

EF = emission factor (lb PM/ lb abrasive) From Table 1 =  
 FR = Flow Rate (lb/hr) =  
 w = fraction of time of wet blasting =  
 N = number of nozzles =

0.010
443.485
0 %
1

<b>Uncontrolled PM Emissions =</b>	<b>4.43 lb/hr</b>
	<b>19.42 ton/yr</b>

**METHODOLOGY**

Emission Factors from STAPPA/ALAPCO "Air Quality Permits", Vol. I, Section 3 "Abrasive Blasting" (1991 edition)

Ton/yr = lb/hr X 8760 hr/yr X ton/2000 lbs

Flow Rate (FR) (lb/hr) = FR1 x (ID/ID1)2 x (D/D1)

E = EF x FR x (1-w/200) x N

w should be entered in as a whole number (if w is 50%, enter 50)

PM10 = PM

Actual PM emissions estimate for 2006 = EF x FR x ton/2000 lbs = 0.01 lb PM/lb abrasive x 303,800 pounds abrasives x ton/2000 lbs = 1.52 tons/year uncontrolled.

**Appendix A: Emissions Calculations**

150000 7 heaters each @  
 563000 1 heater @  
 1613000 total Btu input

**Natural Gas Combustion Only**  
 MM BTU/HR <100

**Company Name:** Indy Railway Service Corporation  
**Address City IN Zip:** 6111 West Hanna Avenue, Indianapolis, IN 46241  
**Permit Number:** M097-23827-00265  
**Plt ID:** 097-00265  
**Reviewer:** M. Caraher  
**Date:** 05/21/07

Heat Input Capacity  
 MMBtu/hr

Potential Throughput  
 MMCF/yr

1.61

14.13

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	1.90	7.60	0.60	100.0	5.50	84.00
				**see below		
Potential Emission in tons/yr	0.01	0.05	0.00	0.71	0.04	0.59

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

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

**Methodology**

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

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

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

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

See next page for HAPs emissions calculations.

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

**Company Name:** Indy Railway Service Corporation  
**Address City IN Zip:** 6111 West Hanna Avenue, Indianapolis, IN 46241  
**Permit Number:** M097-23827-00265  
**Plt ID:** 097-00265  
**Reviewer:** M. Caraher  
**Date:** 05/21/07

HAPs - Organics						Combined HAPs
Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03	
Potential Emission in tons/yr	1.484E-05	8.478E-06	5.299E-04	1.272E-02	2.402E-05	<b>1.329E-02</b>
<hr/>						
HAPs - Metals						Combined HAPs
Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03	
Potential Emission in tons/yr	3.532E-06	7.771E-06	9.891E-06	2.685E-06	1.484E-05	<b>3.872E-05</b>
Total						<b>1.333E-02</b>

Methodology is the same as previous page

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

**Appendix A: Emissions Calculations**  
**Commercial/Institutional/Residential Combustors (< 100 mmBtu/hr)**  
**#1 and #2 Fuel Oil**

230000 2 heaters each @  
 155000 1 heater @  


---

 615000 total

**Company Name:** Indy Railway Service Corporation  
**Address, City IN Zip:** 6111 West Hanna Avenue, Indianapolis, IN 46241  
**Permit Number:** M097-23827-00265  
**Plt ID:** 097-00265  
**Reviewer:** M. Caraher  
**Date:** 05/21/07

Heat Input Capacity  
 MMBtu/hr

Potential Throughput  
 kgals/year

S = Weight % Sulfur

0.5

0.62

38.48

Emission Factor in lb/kgal	Pollutant					
	PM*	PM10	SO2	NOx	VOC	CO
	2.00	1.08	71.00 (142.0S)	20.00	0.34	5.00
Potential Emission in tons/yr	0.04	0.02	1.37	0.38	0.01	0.10

**Methodology**

1 gallon of No. 2 Fuel Oil has a heating value of 140,000 Btu

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.140 MM Btu

Emission Factors are from AP 42, Tables 1.3-1, 1.3-2, and 1.3-3 (SCC 1-03-005-01/02/03) Supplement E 9/98 (see erata file)

\*PM emission factor is filterable PM only. Condensable PM emission factor is 1.3 lb/kgal.

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

See next page for HAPs emission calculations.

**Appendix A: Emissions Calculations**  
**Commercial/Institutional/Residential Combustors (< 100 mmBtu/hr)**  
**#1 and #2 Fuel Oil**  
**HAPs Emissions**

**Company Name: Indy Railway Service Corporation**  
**Address, City IN Zip: 6111 West Hanna Avenue, Indianapolis, IN 46241**  
**Permit Number: M097-23827-00265**  
**Plt ID: 097-00265**  
**Reviewer: M. Caraher**  
**Date: 05/21/07**

HAPs - Metals						Combined HAPs
Emission Factor in lb/mmBtu	Arsenic 4.0E-06	Beryllium 3.0E-06	Cadmium 3.0E-06	Chromium 3.0E-06	Lead 9.0E-06	
Potential Emission in tons/yr	1.08E-05	8.08E-06	8.08E-06	8.08E-06	2.42E-05	<b>5.93E-05</b>
HAPs - Metals (continued)						
Emission Factor in lb/mmBtu	Mercury 3.0E-06	Manganese 6.0E-06	Nickel 3.0E-06	Selenium 1.5E-05		
Potential Emission in tons/yr	8.08E-06	1.62E-05	8.08E-06	4.04E-05		<b>7.27E-05</b>
						<b>1.32E-04</b>

**Methodology**

Methodology is the same as previous page.

No data was available in AP-42 for organic HAPs.

Potential Emissions (tons/year) = Throughput (mmBtu/hr)\*Emission Factor (lb/mmBtu)\*8,760 hrs/yr / 2,000 lb/ton

**Appendix A: Emissions Calculations  
Welding and Thermal Cutting**

**Company Name: Indy Railway Service Corporation  
Address City IN Zip: 6111 West Hanna Avenue, Indianapolis, IN 46241  
Permit Number: M097-23827-00265  
Pit ID: 097-00265  
Reviewer: M. Caraher  
Date: 05/21/07**

PROCESS	Number of Stations	Max. electrode consumption per station (lbs/hr)		EMISSION FACTORS* (lb pollutant/lb electrode)				EMISSIONS (lbs/hr)				HAPS (lbs/hr)	
				PM = PM10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr		
WELDING													
Submerged Arc	6	0.0257		0.036	0.011			0.006	0.002	0.000		0	0.002
Metal Inert Gas (MIG)(carbon steel)	6	0.0525		0.0055	0.0005			0.002	0.000	0.000		0	0.000
Stick (E7018 electrode)	0	0		0.0211	0.0009			0.000	0.000	0.000		0	0.000
Tungsten Inert Gas (TIG)(carbon steel)	0	0		0.0055	0.0005			0.000	0.000	0.000		0	0.000
Oxyacetylene(carbon steel)	0			0.0055	0.0005			0.000	0.000	0.000		0	0.000
FLAME CUTTING	Number of Stations	Max. Metal Thickness Cut (in.)	Max. Metal Cutting Rate (in./minute)	EMISSION FACTORS (lb pollutant/1,000 inches cut, 1" thick)**				EMISSIONS (lbs/hr)				HAPS (lbs/hr)	
				PM = PM10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr		
Oxyacetylene	9	0.5	17	0.1622	0.0005	0.0001	0.0003	0.744	0.000	0.000	0.000	0.000	0.000
Oxymethane	0			0.0815	0.0002		0.0002	0.000	0.000	0.000	0.000	0.000	0.000
Plasma**	0			0.0039				0.000	0.000	0.000	0.000	0.000	0.000
<b>EMISSION TOTALS</b>													
Potential Emissions lbs/hr								0.75					0.00
Potential Emissions lbs/day								18.04					0.05
Potential Emissions tons/year								3.29					0.01

**METHODOLOGY**

\*Emission Factors are default values for carbon steel unless a specific electrode type is noted in the Process column.

\*\*Emission Factor for plasma cutting from American Welding Society (AWS). Trials reported for wet cutting of 8 mm thick mild steel with 3.5 m/min cutting speed (at 0.2 g/min emitted). Therefore, the emission factor for plasma cutting is for 8 mm thick rather than 1 inch, and the maximum metal thickness is not used in calculating the emissions.

Using AWS average values: (0.25 g/min)/(3.6 m/min) x (0.0022 lb/g)/(39.37 in./m) x (1,000 in.) = 0.0039 lb/1,000 in. cut, 8 mm thick  
 Plasma cutting emissions, lb/hr: (# of stations)(max. cutting rate, in./min.)(60 min./hr.)(emission factor, lb. pollutant/1,000 in. cut, 8 mm thick)  
 Cutting emissions, lb/hr: (# of stations)(max. metal thickness, in.)(max. cutting rate, in./min.)(60 min./hr.)(emission factor, lb. pollutant/1,000 in. cut, 1" thick)  
 Welding emissions, lb/hr: (# of stations)(max. lbs of electrode used/hr/station)(emission factor, lb. pollutant/lb. of electrode used)  
 Emissions, lbs/day = emissions, lbs/hr x 24 hrs/day  
 Emissions, tons/yr = emissions, lb/hr x 8,760 hrs/year x 1 ton/2,000 lbs

**Appendix A  
Plant Wide Emissions Summary**

**Company Name: Indy Railway Service Corporation  
Address City IN Zip: 6111 West Hanna Avenue, Indianapolis, IN 46241  
Permit Number: M097-23827-00265  
Plt ID: 097-00265  
Reviewer: M. Caraher  
Date: 05/21/07**

<b>Plant Wide Emissions Summary (tons per year)</b>							<b>Highest Single HAP</b>	<b>Combination HAP</b>
	<b>PM</b>	<b>PM10</b>	<b>NOX</b>	<b>SO2</b>	<b>VOC</b>	<b>CO</b>		
Surface Coating	15.36	15.36	0.00	0.00	23.98	0.00	5.12	8.55
Cleanup Solvent Usage	0.00	0.00	0.00	0.00	4.14	0.00	4.14	4.14
Blasting	19.42	19.42	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas Combustion	0.01	0.05	0.71	0.00	0.04	0.59	0.01	0.01
Fuel Oil Combustion	0.04	0.02	0.38	1.37	0.01	0.00	0.00	0.00
Welding/Cutting	3.29	3.29	0.00	0.00	0.00	0.00	0.01	0.01
<b>Potential to Emit</b>	<b>38.13</b>	<b>38.15</b>	<b>1.09</b>	<b>1.37</b>	<b>28.17</b>	<b>0.59</b>	<b>9.26</b>	<b>12.72</b>