



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We Protect Hoosiers and Our Environment.*

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**Michael R. Pence**  
Governor

**Thomas W. Easterly**  
Commissioner

To: Interested Parties

Date: July 22, 2014

From: Matthew Stuckey, Chief  
Permits Branch  
Office of Air Quality

Source Name: Amsted Rail Company, Inc.

Permit Level: Title V Operating Permit Renewal

Permit Number: 089-33178-00204

Source Location: 4831 Hohman Avenue, Hammond, Indiana

Type of Action Taken: Permit Renewal

## **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 matter referenced above.

The final decision is available on the IDEM website at: <http://www.in.gov/apps/idem/caats/>  
To view the document, select Search option 3, then enter permit 33178.

If you would like to request a paper copy of the permit document, please contact IDEM's central file room:

Indiana Government Center North, Room 1201  
100 North Senate Avenue, MC 50-07  
Indianapolis, IN 46204  
Phone: 1-800-451-6027 (ext. 4-0965)  
Fax (317) 232-8659

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.

*(continues on next page)*

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-6-1(b) or IC 13-15-6-1(a) require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204.

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

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

The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

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

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

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

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



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**Part 70 Operating Permit Renewal  
OFFICE OF AIR QUALITY**

**Amsted Rail Company, Inc.  
4831 Hohman Avenue  
Hammond, Indiana 46327**

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

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

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

Operation Permit No.: 089-33178-00204	
Issued by:  Iryn Calilung, Section Chief Permits Branch Office of Air Quality	Issuance Date: July 22, 2014 Expiration Date: July 22, 2019



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Emergency Occurrence Report

Quarterly Deviation and Compliance Monitoring Report

Attachment A - Fugitive Dust Control Plan

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**SECTION A SOURCE SUMMARY**

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

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

The Permittee owns and operates a stationary a stationary steel coil spring manufacturing plant.

Source Address: 4831 Hohman Avenue, Hammond, Indiana 46327  
 General Source Phone Number: (618) 225-6419  
 SIC Code: 3493 (Steel Springs, Except Wire)  
 County Location: Lake  
 Source Location Status: Nonattainment for 8-hour ozone standard  
 Attainment for all other criteria pollutants  
 Source Status: Part 70 Operating Permit Program  
 Major Source, Emission Offset Rules  
 Minor Source under PSD Rules  
 Minor Source, Section 112 of the Clean Air Act  
 Not 1 of 28 Source Categories

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

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

- (a) Two (2) Natural gas-fired furnaces, equipped with no control and venting inside, which include the following units:

Unit ID	Unit Description	Maximum Design Capacity (MMBtu/hr heat input)	Year Constructed
2-5027	Large Line Bar Furnace	20.5	1938
2-5075	Medium Line Bar Furnace	13.0	1956

- (b) Ten (10) Coil Spring Grinders, which include the following:

Unit ID	Unit Description	Maximum Design Rate (tons springs ground per hour)	Year Constructed
3-0244	#1 Mattson (Large) Grinder	2.15	1989
3-0247	Torrington Ferris Wheel Grinder	0.91	1942
3-0249	Gardner Paddle Wheel Grinder	0.15	1947
3-0385	#1 BESLY Ferris Wheel Grinder	1.55	1978
3-0386	#2 BESLY Ferris Wheel Grinder	1.11	1978
3-0389	Gardner Tub Grinder	0.55	1980
3-0393	#2 Mattson (Small) Grinder	2.15	1989
3-0394	BESLY Swing Grinder	0.35	1998

All the coil spring grinders above are controlled using a pulse-jet baghouse, identified as 3-3037, exhausting to Stack 3.

- (c) Four (4) Coil Spring Manufacturing Process Lines, which include the following:
- (1) Small Line Coil Spring Manufacturing Process, with a maximum capacity of 1.5 tons/hr of coil springs manufactured, includes:
    - (i) One (1) oil quench tank, identified as 3-2821, constructed in 1973, using an oil smoke filter, to control particulate emissions (oil mists) generated during the quenching operation, and venting inside.
    - (ii) One (1) natural gas-fired draw furnace, identified as 2-5163, constructed in 1973, with a maximum design capacity of 5.1 MMBtu/hr heat input, used to stress-relieve the newly coiled springs after the quench operation, no control.
  - (2) Medium Line Coil Spring Manufacturing Process, with a maximum capacity of 5.0 tons/hr of coil springs manufactured, includes:
    - (i) One (1) oil quench tank, identified as 3-2838A, constructed in 2011, using an oil smoke filter, identified as 3-3027A, to control particulate emissions (oil mists) generated during the quenching operation, and venting inside.
    - (ii) One (1) natural gas-fired draw furnace, identified as 2-5097, constructed in 2011, with a maximum design capacity of 5.1 MMBtu/hr heat input, used to stress-relieve the newly coiled springs after the quench operation, no control.
  - (3) Large Line Coil Spring Manufacturing Process, with a maximum capacity of 5 tons/hr of coil springs manufactured, includes:
    - (i) One (1) oil quench tank, identified as 3-2845, constructed in 1959, using an oil smoke filter, identified as 3-3036, to control particulate emissions (oil mists) generated during the quenching operation, and venting inside.
    - (ii) One (1) natural gas-fired draw furnace, identified as 2-5164, constructed in 1959, with a maximum design capacity of 9.8 MMBtu/hr heat input, used to stress-relieve the newly coiled springs after the quench operation, no control.
  - (4) Line 4 Coil Spring Manufacturing Process, with a maximum capacity of 5.25 tons of coil springs manufactured per hour, includes:
    - (i) One (1) oil quench tank, identified as 3-4000, constructed in 2012, using an oil smoke filter, identified as 3-4001, to control particulate emissions (oil mists) generated during the quenching operation, and venting inside.
    - (ii) One (1) natural gas-fired draw furnace, identified as 2-5097A, constructed in 2012, with a maximum design capacity of 5.0 MMBtu/hr heat input, used to stress relieve the newly coiled springs after the quench operation, no control.
- (d) Two (2) Paint Spray Booths, which include the following:
- (1) Paint Spray Booth, identified as 3-2714, constructed in 1980, with a maximum capacity of 0.102 gallons of coating per hour, coating steel coil springs, using High Volume Low Pressure (HVLP) Spray Application method and dry filters -

double wall as PM control, and exhausting to Stack 30.

- (2) Paint Spray Booth, identified as 3-2715, constructed in 1989, with a maximum capacity of 0.061 gallons of coating per hour, coating steel coil springs, using High Volume Low Pressure (HVLP) Spray Application method and using dry filters - double wall as PM control, and exhausting to Stack 31.

- (e) Ten (10) Coil Spring Coating Dip Tanks, for application of rust preventative coatings to steel coil springs, no control, venting inside and include the following:

Unit ID	Coating	Coating Usage (gal/hr)	Year Constructed
3-2813	Water-based Clear Coating	6.1	Prior to 1994
3-2865	Water-based Clear Coating		Prior to 1994
3-2865A	Water-based Clear Coating		Prior to 1994
3-2867	Water-based Clear Coating		2011
3-2870	Water-based Clear Coating		Prior to 1994
3-2869	Solvent-based or Water-based Clear Coating	4.5	Prior to 1994
3-2872	Solvent-based or Water-based Clear Coating		Prior to 1994
3-2873	Solvent-based or Water-based Clear Coating		Prior to 1994
3-2874A	Water-based Clear Coating	4.5	2011
3-2874B	Water-based Clear Coating	4.5	2012

- (f) Six (6) Shot Peeners, which include the following units:

- (1) Pangborn Shot Peener, identified as 3-1804, with a maximum capacity of 0.012 tons steel shots used per hour, using a baghouse, identified as 3-3017, as control, constructed in 1964, and venting inside.
- (2) Wheelabrator Shot Peener, identified as 3-1821, with a maximum capacity of 0.12 tons steel shots used per hour, using a baghouse, identified as 3-3022, as control, constructed in 1972, and venting inside.
- (3) Wheelabrator Shot Peener, identified as 3-1823, with a maximum capacity of 0.21 tons steel shots used per hour, using a baghouse, identified as 3-1823, as control, constructed in 1980, and venting inside.
- (4) One (1) Shot Peener, identified as 3-1824, constructed in 2011, with a maximum capacity of 5.15 tons steel parts used per hour, using a baghouse, identified as 3-3024, for control of particulate matter emissions, and venting inside.
- (5) One (1) Shot Peener, identified as 3-1825, constructed in 2011, with a maximum capacity of 5.15 tons steel parts used per hour, using a baghouse, identified as 3-3025, for control of particulate matter emissions, and venting inside.
- (6) One (1) Shot Peener, identified as 3-1826, constructed in 2012, with a maximum capacity of 5.25 tons of steel parts per hour, using a baghouse, identified as 3-1826A, for particulate matter control, and venting inside.

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

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

- (a) Space heaters, process heaters, heat treat furnaces or boilers using natural gas-fired combustion sources, regulated by 326 IAC 6.8-2-4(b), with heat input equal to or less than ten million (10,000,000) British thermal units per hour, which include the following units:

Unit ID	Unit Description	Maximum Design Capacity (MMBtu/hr heat input)
2-5006	Small Line Slot Furnace	1.5
2-5007	Small Line Slot Furnace	1.5
2-5014	Medium Line Slot Furnace	5.2 (for Units 2-5014 and 2-5015 combined)
2-5015	Medium Line Slot Furnace	
2-5036	Large Line Slot Furnace	2.5
2-5085	Small Line Bar Furnace	8.0
2-5201	Line 4 Slot Furnace	1.25
2-5202	Line 4 Slot Furnace	1.25
2-5203A	Line 4 Bar Furnace	6.5

- (b) One (1) 130-hp emergency fire pump diesel engine, constructed in 1947.  
 Under 40 CFR 63, Subpart ZZZZ, the emergency fire pump engine considered existing RICE.
- (c) Two (2) Cold Cleaner Degreasers, each with maximum capacity of 0.06 gallons per hour, with solvent not remotely stored, not heated, or agitated and solvent spray is not used.
- (d) Paved and unpaved roads and parking lots with public access.
- (e) The following equipment related to manufacturing activities not resulting in the emissions of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.
- (f) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4,000 actual cubic feet per minute, including the following: deburring, buffing, polishing, abrasive blasting, pneumatic conveying and woodworking operations.
- (g) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (h) A gasoline fuel transfer dispensing operation handling less than or equal to one thousand three hundred (1,300) gallons per day and filling storage tanks having a capacity of less than ten thousand five hundred (10,500) gallons. Such storage tanks may be in a fixed location or on mobile equipment.  
 Under 40 CFR 63, Subpart CCCCCC, it is considered an existing affected source.
- (i) A petroleum fuel or other than gasoline dispensing facility, having a storage tank capacity less than or equal to ten thousand five hundred (10,500) gallons, and dispensing three thousand five hundred (3,500) gallons per day or less.
- (j) Application of oils, greases, lubricants or other non-volatile materials applied as temporary protective coatings.

- (k) Routine maintenance and repair of buildings, structures or vehicles at the source where air emissions from those activities would not be associated with any production process, including the following: purging of gas lines and purging of vessels.
- (l) Two (2) quench oil heaters, constructed in 2012, identified as 2-5204A and 2-5204 B, and rated at 2.5 MMBtu/hr, each.
- (m) Production related activities, including the following: Machining where an aqueous cutting coolant continuously floods the machining interface.

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

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

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

## SECTION B GENERAL CONDITIONS

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

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

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

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- (a) This permit, 089-33178-00204, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

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

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

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

### B.4 Enforceability [326 IAC 2-7-7] [IC 13-17-12]

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

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

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

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

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

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

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

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

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- (a) A certification required by this permit meets the requirements of 326 IAC 2-7-6(1) if:

- (1) it contains a certification by a "responsible official" as defined by 326 IAC 2-7-1(35), and
  - (2) the certification states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) The Permittee may use the attached Certification Form, or its equivalent with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.
- (c) A "responsible official" is defined at 326 IAC 2-7-1(35).

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

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

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

and

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

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

The submittal by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

B.10 Preventive Maintenance Plan [326 IAC 2-7-5(12)][326 IAC 1-6-3]

- (a) A Preventive Maintenance Plan meets the requirements of 326 IAC 1-6-3 if it includes, at a minimum:
- (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.

The Permittee shall implement the PMPs.

- (b) If required by specific condition(s) in Section D of this permit where no PMP was previously required, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than ninety (90) days after issuance of this permit or ninety (90) days after initial start-up, whichever is later, including the following information on each facility:
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

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

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

The PMP extension notification does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

The Permittee shall implement the PMPs.

- (c) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions. The PMPs and their submittal do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

- (d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

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

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.

- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

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

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance and Enforcement Branch), or  
Telephone Number: 317-233-0178 (ask for Office of Air Quality, Compliance and Enforcement Branch)  
Facsimile Number: 317-233-6865  
Northwest Regional Office phone: (219) 464-0233; fax: (219) 464-0553.

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

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

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

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

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

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(8) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

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

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

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

- (b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.

- (c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.
- (d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
  - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
  - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
  - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
  - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (f) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(8)]

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

- (a) All terms and conditions of permits established prior to 089-33178-00204 and issued pursuant to permitting programs approved into the state implementation plan have been either:
  - (1) incorporated as originally stated,
  - (2) revised under 326 IAC 2-7-10.5, or
  - (3) deleted under 326 IAC 2-7-10.5.
- (b) Provided that all terms and conditions are accurately reflected in this permit, all previous registrations and permits are superseded by this Part 70 operating permit.

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

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

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

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit.

[326 IAC 2-7-5(6)(C)] The notification by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:
  - (1) That this permit contains a material mistake.
  - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
  - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]
- (c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.16 Permit Renewal [326 IAC 2-7-3][326 IAC 2-7-4][326 IAC 2-7-8(e)]

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(42). The renewal application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

Request for renewal shall be submitted to:

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

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

subsequent to the completeness determination, the Permittee fails to submit by the deadline specified, pursuant to 326 IAC 2-7-4(a)(2)(D), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

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

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

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

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

Any such application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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

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

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

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

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

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

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

Indiana Department of Environmental Management

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

and

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

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

- (5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-7-20(b)(1) and (c)(1). The Permittee shall make such records available, upon reasonable request, for public review.

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

- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(37)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

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

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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

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

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

**B.21 Inspection and Entry [326 IAC 2-7-6][IC 13-14-2-2][IC 13-30-3-1][IC 13-17-3-2]**

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

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

**B.22 Transfer of Ownership or Operational Control [326 IAC 2-7-11]**

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

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

Any such application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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

B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][326 IAC 2-1.1-7]

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

B.24 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314] [326 IAC 1-1-6]

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

## SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

#### C.1 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-1 (Applicability) and 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 twenty percent (20%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

#### C.2 Open Burning [326 IAC 4-1] [IC 13-17-9]

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

#### C.3 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

The Permittee shall not operate an incinerator except as provided in 326 IAC 4-2 or in this permit. The Permittee shall not operate a refuse incinerator or refuse burning equipment except as provided in 326 IAC 9-1-2 or in this permit.

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

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

#### C.5 Fugitive Particulate Matter Emissions [326 IAC 6.8-10-3]

Pursuant to 326 IAC 6.8-10-3 (formerly 326 IAC 6-1-11.1) (Lake County Fugitive Particulate Matter Control Requirements), the particulate matter emissions from source wide activities shall meet the following requirements:

- (a) The average instantaneous opacity of fugitive particulate emissions from a paved road shall not exceed ten percent (10%).
- (b) The average instantaneous opacity of fugitive particulate emissions from an unpaved road shall not exceed ten percent (10%).
- (c) The opacity of fugitive particulate emissions from exposed areas shall not exceed ten percent (10%) on a six (6) minute average.
- (d) Material processing facilities shall include the following:
  - (1) There shall be a zero (0) percent frequency of visible emission observations from a building enclosing all or part of the material processing equipment, except from a vent in the building.

- (2) The PM10 emissions from building vents shall not exceed twenty-two thousandths (0.022) grains per dry standard cubic foot and ten percent (10%) opacity.
- (3) The PM10 stack emissions from a material processing facility shall not exceed twenty-two thousandths (0.022) grains per dry standard cubic foot and ten percent (10%) opacity.
- (e) The opacity of particulate emissions from dust handling equipment shall not exceed ten percent (10%).
- (f) Material transfer limits shall be as follows:
  - (1) The average instantaneous opacity of fugitive particulate emissions from batch transfer shall not exceed ten percent (10%).
  - (2) Where adequate wetting of the material for fugitive particulate emissions control is prohibitive to further processing or reuse of the material, the opacity shall not exceed ten percent (10%), three (3) minute average.
- (g) Any facility or operation not specified in 326 IAC 6.8-10-3 shall meet a twenty percent (20%), three (3) minute average opacity standard.

The Permittee shall achieve these limits by controlling fugitive particulate matter emissions according to the attached Fugitive Dust Control Plan (Attachment A).

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

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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

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

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

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- (a) For performance testing required by this permit, a test protocol, except as provided elsewhere in this permit, shall be submitted to:

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

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

- (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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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

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

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

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

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

#### **C.9 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)][40 CFR 64][326 IAC 3-8]**

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- (a) For new units:  
Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units shall be implemented on and after the date of initial start-up.
- (b) For existing units:  
Unless otherwise specified in this permit, for all monitoring requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance to begin such monitoring. If, due to circumstances beyond the Permittee's control, any monitoring equipment required by this permit cannot be installed and operated no later than ninety (90) days after permit issuance, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

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

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

The notification which shall be submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

- (c) For monitoring required by CAM, at all times, the Permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
- (d) For monitoring required by CAM, except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the Permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the

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

**C.10 Continuous Compliance Plan [326 IAC 6.8-8-1] [326 IAC 6.8-8-8]**

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- (a) Pursuant to 326 IAC 326 IAC 6.8-8-1, the Permittee shall submit to IDEM and maintain at source a copy of the Continuous Compliance Plan (CCP). The Permittee shall perform the inspections, monitoring and record keeping in accordance with the information in 326 IAC 6.8-8-5 through 326 IAC 6.8-8-7 or applicable procedures in the CCP.
- (b) Pursuant to 326 IAC 6.8-8-8, the Permittee shall update the CCP, as needed, retain a copy of any changes and updates to the CCP at the source and make the updated CCP available for inspection by the department. The Permittee shall submit the updated CCP, if required to IDEM, OAQ within thirty (30) days of the update.
- (c) Pursuant to 326 IAC 6.8-8, failure to submit a CCP, maintain all information required by the CCP at the source, or submit update to a CCP is a violation of 326 IAC 6.8-8.

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

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

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

**C.12 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]**

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

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

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

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

**C.14 Response to Excursions or Exceedances [40 CFR 64][326 IAC 3-8][326 IAC 2-7-5] [326 IAC 2-7-6]**

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- (l) Upon detecting an excursion where a response step is required by the D Section, or an exceedance of a limitation, not subject to CAM, in this permit:
  - (a) The Permittee shall take reasonable response steps to restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in

accordance with good air pollution control practices for minimizing excess emissions.

- (b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:
  - (1) initial inspection and evaluation;
  - (2) recording that operations returned or are returning to normal without operator action (such as through response by a computerized distribution control system); or
  - (3) any necessary follow-up actions to return operation to normal or usual manner of operation.
- (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:
  - (1) monitoring results;
  - (2) review of operation and maintenance procedures and records; and/or
  - (3) inspection of the control device, associated capture system, and the process.
- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (e) The Permittee shall record the reasonable response steps taken.

(II)

- (a) *CAM Response to excursions or exceedances.*
  - (1) Upon detecting an excursion or exceedance, subject to CAM, the Permittee shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
  - (2) Determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

- (b) If the Permittee identifies a failure to achieve compliance with an emission limitation, subject to CAM, or standard, subject to CAM, for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the Permittee shall promptly notify the IDEM, OAQ and, if necessary, submit a proposed significant permit modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.
- (c) Based on the results of a determination made under paragraph (II)(a)(2) of this condition, the EPA or IDEM, OAQ may require the Permittee to develop and implement a QIP. The Permittee shall develop and implement a QIP if notified to in writing by the EPA or IDEM, OAQ.
- (d) Elements of a QIP:  
The Permittee shall maintain a written QIP, if required, and have it available for inspection. The plan shall conform to 40 CFR 64.8 b (2).
- (e) If a QIP is required, the Permittee shall develop and implement a QIP as expeditiously as practicable and shall notify the IDEM, OAQ if the period for completing the improvements contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined.
- (f) Following implementation of a QIP, upon any subsequent determination pursuant to paragraph (II)(a)(2) of this condition the EPA or the IDEM, OAQ may require that the Permittee make reasonable changes to the QIP if the QIP is found to have:
  - (1) Failed to address the cause of the control device performance problems;  
or
  - (2) Failed to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.
- (g) Implementation of a QIP shall not excuse the Permittee from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act.
- (h) *CAM recordkeeping requirements.*
  - (1) The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to paragraph (II)(a)(2) of this condition and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under this condition (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions). Section C - General Record Keeping Requirements of this permit contains the Permittee's obligations with regard to the records required by this condition.
  - (2) Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks,

or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements

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

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall submit a description of its response actions to IDEM, OAQ no later than seventy-five (75) days after the date of the test.
- (b) A retest to demonstrate compliance shall be performed no later than one hundred eighty (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred eighty (180) 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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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

**C.16 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]**

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

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

The statement must be submitted to:

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

The emission statement does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

**C.17 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]  
[326 IAC 2-2][326 IAC 2-3]**

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. Support information includes the following, where applicable:
  - (AA) All calibration and maintenance records.

- (BB) All original strip chart recordings for continuous monitoring instrumentation.
  - (CC) Copies of all reports required by the Part 70 permit.
- Records of required monitoring information include the following, where applicable:
- (AA) The date, place, as defined in this permit, and time of sampling or measurements.
  - (BB) The dates analyses were performed.
  - (CC) The company or entity that performed the analyses.
  - (DD) The analytical techniques or methods used.
  - (EE) The results of such analyses.
  - (FF) The operating conditions as existing at the time of sampling or measurement.

These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

- (b) Unless otherwise specified in this permit, for all record keeping requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.
- (c) If there is a reasonable possibility (as defined in 326 IAC 2-2-8 (b)(6)(A), 326 IAC 2-2-8 (b)(6)(B), 326 IAC 2-3-2 (l)(6)(A), and/or 326 IAC 2-3-2 (l)(6)(B)) that a "project" (as defined in 326 IAC 2-2-1(oo) and/or 326 IAC 2-3-1(jj)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(dd) and/or 326 IAC 2-3-1(y)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(pp) and/or 326 IAC 2-3-1(kk)), the Permittee shall comply with following:
  - (1) Before beginning actual construction of the "project" (as defined in 326 IAC 2-2-1(oo) and/or 326 IAC 2-3-1(jj)) at an existing emissions unit, document and maintain the following records:
    - (A) A description of the project.
    - (B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.
    - (C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:
      - (i) Baseline actual emissions;
      - (ii) Projected actual emissions;
      - (iii) Amount of emissions excluded under section 326 IAC 2-2-1(pp)(2)(A)(iii) and/or 326 IAC 2-3-1 (kk)(2)(A)(iii); and
      - (iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.

- (d) If there is a reasonable possibility (as defined in 326 IAC 2-2-8 (b)(6)(A) and/or 326 IAC 2-3-2 (l)(6)(A)) that a "project" (as defined in 326 IAC 2-2-1(oo) and/or 326 IAC 2-3-1(jj)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(dd) and/or 326 IAC 2-3-1(y)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(pp) and/or 326 IAC 2-3-1(kk)), the Permittee shall comply with following:
- (1) Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any existing emissions unit identified in (1)(B) above; and
  - (2) Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity of or the potential to emit that regulated NSR pollutant at the emissions unit.
- (e) The requirements specified in (c) and (d) above as it relates to the PSD regulations would only apply if the source becomes a major source under the PSD regulations found at 326 IAC 2-2.

C.18 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]  
[326 IAC 2-2][326 IAC 2-3] [40 CFR 64][326 IAC 3-8]

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- (a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Proper notice submittal under Section B –Emergency Provisions satisfies the reporting requirements of this paragraph. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported except that a deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. This report shall be submitted not later than thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

On and after the date by which the Permittee must use monitoring that meets the requirements of 40 CFR Part 64 and 326 IAC 3-8, the Permittee shall submit CAM reports to the IDEM, OAQ.

A report for monitoring under 40 CFR Part 64 and 326 IAC 3-8 shall include, at a minimum, the information required under paragraph (a) of this condition and the following information, as applicable:

- (1) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
- (2) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
- (3) A description of the actions taken to implement a QIP during the reporting period as specified in Section C-Response to Excursions or Exceedances. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed

and reduced the likelihood of similar levels of excursions or exceedances occurring.

The Permittee may combine the Quarterly Deviation and Compliance Monitoring Report and a report pursuant to 40 CFR 64 and 326 IAC 3-8.

- (b) The address for report submittal is:
- Indiana Department of Environmental Management  
Compliance and Enforcement Branch, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (d) 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.
- (e) If the Permittee is required to comply with the recordkeeping provisions of (d) in Section C - General Record Keeping Requirements for any "project" (as defined in 326 IAC 2-2-1 (oo) and/or 326 IAC 2-3-1 (jj)) at an existing emissions unit, and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ:
- (1) The annual emissions, in tons per year, from the project identified in (c)(1) in Section C- General Record Keeping Requirements exceed the baseline actual emissions, as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(i), by a significant amount, as defined in 326 IAC 2-2-1 (ww) and/or 326 IAC 2-3-1 (pp), for that regulated NSR pollutant, and
  - (2) The emissions differ from the preconstruction projection as documented and maintained under Section C - General Record Keeping Requirements (c)(1)(C)(ii).
- (f) The report for project at an existing emissions unit shall be submitted no later than sixty (60) days after the end of the year and contain the following:
- (1) The name, address, and telephone number of the major stationary source.
  - (2) The annual emissions calculated in accordance with (d)(1) and (2) in Section C - General Record Keeping Requirements.
  - (3) The emissions calculated under the actual-to-projected actual test stated in 326 IAC 2-2-2(d)(3) and/or 326 IAC 2-3-2(c)(3).
  - (4) Any other information that the Permittee wishes to include in this report such as an explanation as to why the emissions differ from the preconstruction projection.

Reports required in this part shall be submitted to:

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

- (g) The Permittee shall make the information required to be documented and maintained in accordance with (c) in Section C- General Record Keeping Requirements available for review upon a request for inspection by IDEM, OAQ. The general public may request this information from the IDEM, OAQ under 326 IAC 17.1.
- (h) The requirements specified in (e) and (f) above as it relates to the PSD regulations would only apply if the source becomes a major source under the PSD regulations found at 326 IAC 2-2.

### **Stratospheric Ozone Protection**

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

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

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

**Emissions Unit Description: Coil Spring Grinders**

- (a) Two (2) Natural gas-fired furnaces, equipped with no control and venting inside, which include the following units:

Unit ID	Unit Description	Maximum Design Capacity (MMBtu/hr heat input)	Year Constructed
2-5027	Large Line Bar Furnace	20.5	1938
2-5075	Medium Line Bar Furnace	13.0	1956

- (b) Ten (10) Coil Spring Grinders, which include the following:

Unit ID	Unit Description	Maximum Design Rate (tons springs ground per hour)	Year Constructed
3-0244	#1 Mattson (Large) Grinder	2.15	1989
3-0247	Torrington Ferris Wheel Grinder	0.91	1942
3-0249	Gardner Paddle Wheel Grinder	0.15	1947
3-0385	#1 BESLY Ferris Wheel Grinder	1.55	1978
3-0386	#2 BESLY Ferris Wheel Grinder	1.11	1978
3-0389	Gardner Tub Grinder	0.55	1980
3-0393	#2 Mattson (Small) Grinder	2.15	1989
3-0394	BESLY Swing Grinder	0.35	1998

All the coil spring grinders above are controlled using a pulse-jet baghouse, identified as 3-3037, exhausting to Stack 3.

**Insignificant Activities**

- (a) Space heaters, process heaters, heat treat furnaces or boilers using natural gas-fired combustion sources, regulated by 326 IAC 6.8-2-4(b), with heat input equal to or less than ten million (10,000,000) British thermal units per hour, which include the following units:

Unit ID	Unit Description	Maximum Design Capacity (MMBtu/hr heat input)
2-5006	Small Line Slot Furnace	1.5
2-5007	Small Line Slot Furnace	1.5
2-5014	Medium Line Slot Furnace	5.2 (for Units 2-5014 and 2-5015 combined)
2-5015	Medium Line Slot Furnace	
2-5036	Large Line Slot Furnace	2.5
2-5085	Small Line Bar Furnace	8.0
2-5201	Line 4 Slot Furnace	1.25
2-5202	Line 4 Slot Furnace	1.25
2-5203A	Line 4 Bar Furnace	6.5

- (l) Two (2) quench oil heaters, constructed in 2012, identified as 2-5204A and 2-5204 B, and rated at 2.5 MMBtu/hr, each.

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

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

**D.1.1 Particulate Matter Limitations for Lake County [326 IAC 6.8]**

Pursuant to 326 IAC 6.8-1-2, the PM emissions after control from the quench oil heaters (2-5204A and 2-5204 B) shall not exceed 0.03 grains/dscf.

**D.1.2 Particulate Matter less than 10 microns in diameter (PM10) [326 IAC 6.8-2-4]**

(a) Pursuant to 326 IAC 6.8-2-4(a) (Lake County PM10 Emission Requirements), PM10 emissions after control from the facilities listed below shall not exceed the limit as specified below.

Process served by Stack 3	Unit ID	PM10 Emission Limit (lb/hr)
#1 Mattison (Large) Grinder	3-0244	2.085
Torrington Ferris Wheel Grinder	3-0247	
Gardner Paddle Wheel Grinder	3-0249	
#1 BESLY Ferris Wheel Grinder	3-0385	
#2 BESLY Ferris Wheel Grinder	3-0386	
Gardner Tub Grinder	3-0389	
#2 Mattison (Small) Grinder	3-0393	
BESLY Swing Grinder	3-0394	

(b) Pursuant to 326 IAC 6.8-2-4(b) (Lake County: PM10 Emission Requirements), the furnaces listed in this section shall fire natural gas only.

**D.1.3 PSD Minor Limits [326 IAC 2-2]**

In order to render the requirements of 326 IAC 2-2 not applicable, the Permittee shall comply with the following:

Emission Unit	ID	PM Limit (lb/hr)	PM10 Limit (lb/hr)	PM2.5 Limit (lb/hr)
#1 Mattison (Large) Grinder	3-0244	0.99	2.085	0.99
Torrington Ferris Wheel Grinder	3-0247			
Gardner Paddle Wheel Grinder	3-0249			
#1 Besley Ferris Wheel Grinder	3-0385			
#2 Besley Ferris Wheel Grinder	3-0386			
Gardner Tub Grinder	3-0389			
#2 Mattison (Small) Grinder	3-0393			
Besley Swing Grinder	3-0394			

Compliance with these limits, combined with the limits in Conditions D.2.3, and D.4.3, and the unrestricted potential to emit of PM, PM10 and PM2.5 from all other equipment at this source will limit the potential to emit of PM, PM10 and PM2.5 from the entire source to less than two hundred fifty (250) tons per year, each, and render 326 IAC 2-2 not applicable.

**D.1.4 Preventive Maintenance Plan [326 IAC 2-7-5(12)]**

A Preventive Maintenance Plan (PMP) is required for the facilities listed below and its control device (baghouse 3-3037). Section B - Preventive Maintenance Plan contains the Permittee's obligations with regard to the preventive maintenance plan required by this condition.

Unit ID	Unit Description
3-0244	#1 Mattson (Large) Grinder
3-0247	Torrington Ferris Wheel Grinder
3-0249	Gardner Paddle Wheel Grinder
3-0385	#1 BESLY Ferris Wheel Grinder
3-0386	#2 BESLY Ferris Wheel Grinder
3-0389	Gardner Tub Grinder
3-0393	#2 Mattson (Small) Grinder
3-0394	BESLY Swing Grinder

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

**D.1.5 Particulate Control**

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- (a) In order to comply with Conditions D.1.2(a) and D.1.3, the baghouse (3-3037) for PM, PM10, and PM2.5 control shall be in operation and control emissions at all times when one or more of the associated grinders to this baghouse is in operation.
  - (b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification. If the failed compartment can be isolated and testing has confirmed that compliance can be achieved with one compartment down, this notification is not required.

**D.1.6 Broken or Failed Bag Detection – Single Compartment Baghouse**

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

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

**D.1.7 Testing Requirements [326 IAC 2-1.1-11]**

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- (a) In order to demonstrate compliance with Condition D.1.2(a), the Permittee shall perform PM10 testing of the baghouse (3-3037) controlling the grinders listed below no later than 5 years after the most recent testing.

Emission Unit	ID
#1 Mattison (Large) Grinder	3-0244
Torrington Ferris Wheel Grinder	3-0247

Gardner Paddle Wheel Grinder	3-0249
#1 BESLY Ferris Wheel Grinder	3-0385
#2 BESLY Ferris Wheel Grinder	3-0386
Gardner Tub Grinder	3-0389
#2 Mattison (Small) Grinder	3-0393
BESLY Swing Grinder	3-0394

This testing shall be conducted utilizing methods as approved by the Commissioner. This testing shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration.

PM10 includes filterable and condensable PM.

- (b) In order to demonstrate compliance with Condition D.1.3, the Permittee shall perform PM and PM2.5 testing of the baghouse (3-3037) controlling the grinders listed below no later than 5 years after the most recent testing.

Emission Unit	ID
#1 Mattison (Large) Grinder	3-0244
Torrington Ferris Wheel Grinder	3-0247
Gardner Paddle Wheel Grinder	3-0249
#1 BESLY Ferris Wheel Grinder	3-0385
#2 BESLY Ferris Wheel Grinder	3-0386
Gardner Tub Grinder	3-0389
#2 Mattison (Small) Grinder	3-0393
BESLY Swing Grinder	3-0394

This testing shall be conducted utilizing methods as approved by the Commissioner. This testing shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration.

PM2.5 includes filterable and condensable PM.

- (c) Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligations with regard to the testing required by this condition.

The Permittee has an option to comply with the testing requirements specified in paragraphs (a) and (b) above, concurrently through one compliance test for the baghouse (3-3037).

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

**D.1.8 Visible Emissions Notations [40 CFR 64]**

- (a) Visible emission notations of the baghouse (3-3037) stack exhaust shall be performed at least once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps. Observation of abnormal emissions that do not violate an applicable opacity limit is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit. Section C – Response to Excursions and Exceedances contains the Permittee's obligations with regard to the reasonable response steps required by this condition.

The above monitoring conditions also are required under 40 CFR 64 for Grinders 3-0244, 3-0385 and 3-0393 (for PM).

#### D.1.9 Parametric Monitoring [40 CFR 64]

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- (a) The Permittee shall record the pressure drop across the baghouse (3-3037) used in conjunction with the coil spring grinders at least once per day when one or more of the associated grinders to this baghouse is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range, the Permittee shall take a reasonable response. The normal range for this unit is a pressure drop between 3.0 and 6.0 inches of water, unless a different upper-bound or lower-bound value for this range is determined during the latest stack test. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit. Section C – Response to Excursions or Exceedances contains the Permittee's obligations with regard to the reasonable response steps required by this condition.
- (b) The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ and shall be calibrated or replaced at least once every six (6) months.

The above monitoring conditions also are required under 40 CFR 64 for Grinder 3-0244, 3-0385 and 3-0393 (for PM).

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

#### D.1.10 Record Keeping Requirements

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- (a) To document the compliance status with Condition D.1.8, the Permittee shall maintain a daily record of visible emission notations of the baghouse (3-3037) stack exhaust. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).
- (b) To document the compliance status with Condition D.1.9(a), the Permittee shall maintain a daily record of the pressure drop reading across the baghouse (3-3037). The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).
- (c) To document the compliance status with Condition D.1.9(b), the Permittee shall maintain records of calibrations of the instrument used for determining the pressure drop across the baghouse (3-3037).
- (d) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the record keeping required by this condition.

## SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

### **Emissions Unit Description:** Coil Spring Manufacturing Process Lines

- (c) Four (4) Coil Spring Manufacturing Process Lines, which include the following:
- (1) Small Line Coil Spring Manufacturing Process, with a maximum capacity of 1.5 tons/hr of coil springs manufactured, includes:
    - (i) One (1) oil quench tank, identified as 3-2821, constructed in 1973, using an oil smoke filter, to control particulate emissions (oil mists) generated during the quenching operation, and venting inside.
    - (ii) One (1) natural gas-fired draw furnace, identified as 2-5163, constructed in 1973, with a maximum design capacity of 5.1 MMBtu/hr heat input, used to stress-relieve the newly coiled springs after the quench operation, no control.
  - (2) Medium Line Coil Spring Manufacturing Process, with a maximum capacity of 5.0 tons/hr of coil springs manufactured, includes:
    - (i) One (1) oil quench tank, identified as 3-2838A, constructed in 2011, using an oil smoke filter, identified as 3-3027A, to control particulate emissions (oil mists) generated during the quenching operation, and venting inside.
    - (ii) One (1) natural gas-fired draw furnace, identified as 2-5097, constructed in 2011, with a maximum design capacity of 5.1 MMBtu/hr heat input, used to stress-relieve the newly coiled springs after the quench operation, no control.
  - (3) Large Line Coil Spring Manufacturing Process, with a maximum capacity of 5 tons/hr of coil springs manufactured, includes:
    - (i) One (1) oil quench tank, identified as 3-2845, constructed in 1959, using an oil smoke filter, identified as 3-3036, to control particulate emissions (oil mists) generated during the quenching operation, and venting inside.
    - (ii) One (1) natural gas-fired draw furnace, identified as 2-5164, constructed in 1959, with a maximum design capacity of 9.8 MMBtu/hr heat input, used to stress-relieve the newly coiled springs after the quench operation, no control.
  - (4) Line 4 Coil Spring Manufacturing Process, with a maximum capacity of 5.25 tons of coil springs manufactured per hour, includes:
    - (i) One (1) oil quench tank, identified as 3-4000, constructed in 2012, using an oil smoke filter, identified as 3-4001, to control particulate emissions (oil mists) generated during the quenching operation, and venting inside.
    - (ii) One (1) natural gas-fired draw furnace, identified as 2-5097A, constructed in 2012, with a maximum design capacity of 5.0 MMBtu/hr heat input, used to stress relieve the newly coiled springs after the quench operation, no control.

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

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

**D.2.1 Particulate Matter less than 10 microns in diameter (PM10) [326 IAC 6.8-2]**

(a) Pursuant to 326 IAC 6.8-2-4(a) (Lake County: PM10 Emission Requirements), PM10 emissions after control from the facilities listed below shall not exceed the limits as specified below.

Emission Unit	ID	Emission Limit (lb/hr)
Small Line Coil Spring Manufacturing Process	3-2821	1.05
Medium Line Coil Spring Manufacturing Process	3-2838A	1.05
Large Line Coil Spring Manufacturing Process	3-2845	1.75

(b) Pursuant to 326 IAC 6.8-2-4(b), the Small Line draw furnace (2-5163), Medium Line draw furnace (2-5097), Large Line draw furnace (2-5164) and Line 4 draw furnace (2-5097A) shall fire natural gas only.

**D.2.2 Particulate Matter Limitations for Lake County [326 IAC 6.8-1-2]**

Pursuant to 326 IAC 6.8-1-2(a), the PM emissions after control from the oil quench tank (3-4000) of Line 4 Coil Spring Manufacturing Process shall not exceed 0.03 grains per dry standard cubic foot (gr/dscf).

**D.2.3 PSD Minor Limits [326 IAC 2-2]**

In order to render the requirements of 326 IAC 2-2 not applicable, the Permittee shall comply with the following:

Emission Unit	ID	PM Limit (lb/hr)	PM10 Limit (lb/hr)	PM2.5 Limit (lb/hr)
Small Line Quench Tank	3-2821	2.97	1.05	1.05
Medium Line Quench Tank	3-2838A	2.97	2.97	2.97
Large Line Quench Tank	3-2845	2.97	1.75	1.75
Line 4 Quench Tank	3-4000	3.09	3.09	3.09

Compliance with these limits, combined with the limits in Conditions D.1.3 and D.4.3, and the unrestricted potential to emit of PM, PM10 and PM2.5 from all other equipment at this source will limit the potential to emit of PM, PM10 and PM2.5 from the entire source to less than two hundred fifty (250) tons per year, each, and render 326 IAC 2-2 not applicable.

**D.2.4 Preventive Maintenance Plan [326 IAC 2-7-5(12)]**

A Preventive Maintenance Plan (PMP) is required for the facilities listed below and its control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligations with regard to the preventive maintenance plan required by this condition.

Emission Unit	ID
Small Line Quench Tank	3-2821
Medium Line Quench Tank	3-2838A
Large Line Quench Tank	3-2845
Line 4 Quench Tank	3-4000

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

#### D.2.5 Particulate Control

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- (a) In order to ensure compliance with Conditions D.2.1(a), and D.2.3, the oil smoke filter equipped on the Small Line Coil Spring Manufacturing Process for PM, PM10, PM2.5 control shall be in operation and control emissions at all times when the Small Line Coil Spring Manufacturing Process is in operation.
- (b) In order to ensure compliance with Conditions D.2.1(a), and D.2.3, the oil smoke filter equipped on the Medium Line Coil Spring Manufacturing Process for PM, PM10, PM2.5 control shall be in operation and control emissions at all times when the Medium Line Coil Spring Manufacturing Process is in operation.
- (c) In order to ensure compliance with Conditions D.2.1(a) and D.2.3, the oil smoke filter equipped on the Large Line Coil Spring Manufacturing Process for PM, PM10, and PM2.5 control shall be in operation and control emissions at all times when the Large Line Coil Spring Manufacturing Process is in operation.
- (d) In order to ensure compliance with Conditions D.2.2 and D.2.3, the oil smoke filter equipped on the Line 4 Coil Spring Manufacturing Process for PM, PM10 and PM2.5 control shall be in operation and control emissions at all times the Line 4 Coil Spring Manufacturing Process is in operation.

#### D.2.6 Testing Requirements

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- (a) In order to demonstrate the compliance status with Condition D.2.1(a), the Permittee shall perform PM10 testing for the units listed below no later than 5 years after the most recent testing.

Emission Unit	ID
Small Line Coil Spring Manufacturing Process	3-2821
Medium Line Coil Spring Manufacturing Process	3-2838A
Large Line Coil Spring Manufacturing Process	3-2845

This testing shall be conducted utilizing methods as approved by the Commissioner. This testing shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration.

PM10 includes filterable and condensable PM.

- (b) In order to demonstrate the compliance status with Condition D.2.2, the Permittee shall perform PM testing for the oil quench tank (3-4000) of Line 4 Coil Spring Manufacturing Process, no later than 5 years after the most recent testing. This testing shall be conducted utilizing methods as approved by the Commissioner. This testing shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration.
- (c) In order to demonstrate the compliance status with Condition D.2.3, the Permittee shall perform PM, PM10, and PM2.5 testing for the units listed below no later than 5 years after the most recent testing.

Emission Unit	ID
Small Line Quench Tank	3-2821
Medium Line Quench Tank	3-2838A
Line 4 Quench Tank	3-4000

This testing shall be conducted utilizing methods as approved by the Commissioner. This testing shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration.

PM10 and PM2.5 includes filterable and condensable PM.

- (d) In order to demonstrate the compliance status with Condition D.2.3, the Permittee shall perform PM, PM10, and PM2.5 testing for the unit listed below no later than one hundred eighty (180) days after the issuance of renewal T089-33178-00204.

Emission Unit	ID
Large Line Quench Tank	3-2845

This testing shall be conducted utilizing methods as approved by the Commissioner. This testing shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration.

PM10 and PM2.5 includes filterable and condensable PM.

- (e) Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

The Permittee has an option to comply with the testing requirements specified in paragraphs (a) through (d) above, concurrently through one compliance test for PM, PM10 and PM2.5 for each emission unit.

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

#### **D.2.7 Oil Smoke Filter Inspections**

An inspection shall be performed each calendar quarter of oil smoke filters 3-4000, 3-2838A, 3-2845 and 3-2821 controlling its associated quench tanks. All defective oil smoke filters shall be replaced.

#### **D.2.8 Broken or Failed Oil Smoke Filter Detection**

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

Oil Smoke Filter failure can be indicated by a significant drop in the oil smoke filter's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas

temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

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

**D.2.9 Record Keeping Requirements**

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- (a) To document the compliance status with Condition D.2.7, the Permittee shall maintain records of the results of the inspections required under Condition D.2.7.
- (b) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

### SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

#### **Emissions Unit Description: Spray Booths**

- (d) Two (2) Paint Spray Booths, which include the following:
- (1) Paint Spray Booth, identified as 3-2714, constructed in 1980, with a maximum capacity of 0.102 gallons of coating per hour, coating steel coil springs, using High Volume Low Pressure (HVLP) Spray Application method and dry filters - double wall as PM control, and exhausting to Stack 30.
  - (2) Paint Spray Booth, identified as 3-2715, constructed in 1989, with a maximum capacity of 0.061 gallons of coating per hour, coating steel coil springs, using High Volume Low Pressure (HVLP) Spray Application method and using dry filters - double wall as PM control, and exhausting to Stack 31.

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

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

##### D.3.1 Volatile Organic Compounds (VOC) [326 IAC 8-1-2] [326 IAC 8-2-9]

- (a) Pursuant to 326 IAC 8-2-9, the Permittee shall not allow the discharge into the atmosphere VOC in excess of two and eight-tenths (2.8) pounds of VOC per gallon of coating, excluding water, as delivered to the applicator.
- (b) Pursuant to 326 IAC 8-2-9(d)(2), one (1) or a combination of the following equipment shall be used for coating application:
- (A) Electrostatic equipment.
  - (B) High volume low-pressure (HVLP) spray equipment.
  - (C) Flow coating.
  - (D) Roller coating.
  - (E) Dip coating, including electrodeposition.
  - (F) Airless spray.
  - (G) Air-assisted airless spray.
  - (H) Other coating application method capable of achieving a transfer efficiency equivalent or better than achieved by HVLP spraying.
- (c) Pursuant to 326 IAC 8-2-9(f), the work practices shall include, but not be limited to, the following:
- (1) Store all VOC containing coatings, thinners, coating related waste, and cleaning materials in closed containers.
  - (2) Ensure that mixing and storage containers used for VOC containing coatings, thinners, coating related waste, and cleaning materials are kept closed at all times except when depositing or removing these materials.
  - (3) Minimize spills of VOC containing coatings, thinners, coating related waste, and cleaning materials.
  - (4) Convey VOC containing coatings, thinners, coating related waste, and cleaning materials from one (1) location to another in closed containers or pipes.
  - (5) Minimize VOC emissions from the cleaning of application, storage, mixing, and conveying equipment by ensuring that equipment cleaning is performed without

atomizing the cleaning solvent and all spent solvent is captured in closed containers.

**D.3.2 Particulate Matter Limitations for Lake County [326 IAC 6.8-1-2]**

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Pursuant to 326 IAC 6.8-1-2(h), the Permittee shall install and operate particulate control device on Paint Spray Booths 3-2714 and 3-2715, if a coating application rate at these booths increases to greater than five (5) gallons per day.

**D.3.3 Preventive Maintenance Plan [326 IAC 2-7-5(12)]**

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A Preventive Maintenance Plan (PMP) is required for the Paint Spray Booths 3-2714 and 3-2715, and its control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligations with regard to the preventive maintenance plan required by this condition.

**Compliance Determination Requirements**

**D.3.4 Volatile Organic Compounds (VOC) [326 IAC 8-1-4] [326 IAC 8-1-2]**

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- (a) For compliant coating and daily volume weighted average options  
Compliance with the VOC content and usage limitations contained in Condition D.3.1(a) 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 "as supplied" and "as applied" VOC data sheets. IDEM, OAQ reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.
- (b) For daily volume weighted average option  
Compliance with the VOC content limit in Condition D.3.1(a), when using non compliant coating, shall be determined pursuant to 326 IAC 8-1-2(a)(7), using a volume weighted average of coatings on a daily basis.

This volume weighted average shall be determined by the following equation:

$$A = [ \sum (c \times U) / \sum U ]$$

Where:

A is the volume weighted average in pounds VOC per gallon less water as applied;

C is the VOC content of the coating in pounds VOC per gallon less water as applied; and

U is the usage rate of the coating in gallons per day.

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

**D.3.5 Record Keeping Requirements**

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- (a) For compliant coating option  
To document compliance with Condition D.3.1(a), the Permittee shall maintain records in accordance with (1) through (4) below when compliant coating is used. Records maintained for (1) through (4) shall be taken as stated below and shall be complete and sufficient to establish compliance with the VOC usage limit established in Condition D.3.1(a).
- (1) The VOC content of each coating material and solvent used less water.
  - (2) The amount of coating material and solvent used on daily 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 solvent.
  - (3) The daily cleanup solvent usage; and
  - (4) The total VOC usage for each day.
- (b) For daily volume weighted average option  
To document compliance with Condition D.3.1(a), the Permittee shall maintain records in accordance with (1) through (5) below when Daily volume weighted average option is used. Records maintained for (1) through (5) shall be taken as stated below and shall be complete and sufficient to establish compliance with the VOC usage limit established in Condition D.3.1(a).
- (1) The VOC content of each coating material and solvent used less water.
  - (2) The amount of coating material and solvent used on daily 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 solvent.
  - (3) The volume weighted average VOC content of the coatings used for each day;
  - (4) The daily cleanup solvent usage; and
  - (5) The total VOC usage for each day.
- (c) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the record keeping required by this condition.

**SECTION D.4 EMISSIONS UNIT OPERATION CONDITIONS**

**Emissions Unit Description:** Dip Tanks

(e) Ten (10) Coil Spring Coating Dip Tanks, for application of rust preventative coatings to steel coil springs, no control, venting inside and include the following:

Unit ID	Coating	Coating Usage (gal/hr)	Year Constructed
3-2813	Water-based Clear Coating	6.1	Prior to 1994
3-2865	Water-based Clear Coating		Prior to 1994
3-2865A	Water-based Clear Coating		Prior to 1994
3-2867	Water-based Clear Coating		2011
3-2870	Water-based Clear Coating		Prior to 1994
3-2869	Solvent-based or Water-based Clear Coating	4.5	Prior to 1994
3-2872	Solvent-based or Water-based Clear Coating		Prior to 1994
3-2873	Solvent-based or Water-based Clear Coating		Prior to 1994
3-2874A	Water-based Clear Coating	4.5	2011
3-2874B	Water-based Clear Coating	4.5	2012

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

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

**D.4.1 Volatile Organic Compounds (VOC) [326 IAC 8-1-2] [326 IAC 8-2-9]**

- (a) Pursuant to 326 IAC 8-2-9, the Permittee shall not allow the discharge into the atmosphere VOC in excess of two and eight-tenths (2.8) pounds of VOC per gallon of coating, excluding water, as delivered to the applicator.
- (b) Pursuant to 326 IAC 8-2-9(d)(2), one (1) or a combination of the following equipment shall be used for coating application:
  - (A) Electrostatic equipment.
  - (B) High volume low-pressure (HVLP) spray equipment.
  - (C) Flow coating.
  - (D) Roller coating.
  - (E) Dip coating, including electrodeposition.
  - (F) Airless spray.
  - (G) Air-assisted airless spray.
  - (H) Other coating application method capable of achieving a transfer efficiency equivalent or better than achieved by HVLP spraying.
- (c) Pursuant to 326 IAC 8-2-9(f), the work practices shall include, but not be limited to, the following:
  - (1) Store all VOC containing coatings, thinners, coating related waste, and cleaning materials in closed containers.
  - (2) Ensure that mixing and storage containers used for VOC containing coatings, thinners, coating related waste, and cleaning materials are kept closed at all times except when depositing or removing these materials.
  - (3) Minimize spills of VOC containing coatings, thinners, coating related waste, and cleaning materials.

- (4) Convey VOC containing coatings, thinners, coating related waste, and cleaning materials from one (1) location to another in closed containers or pipes.
- (5) Minimize VOC emissions from the cleaning of application, storage, mixing, and conveying equipment by ensuring that equipment cleaning is performed without atomizing the cleaning solvent and all spent solvent is captured in closed containers.

### Compliance Determination Requirements

#### D.4.2 Volatile Organic Compounds (VOC) [326 IAC 8-1-4] [326 IAC 8-1-2]

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- (a) For compliant coating and daily volume weighted average options  
Compliance with the VOC content and usage limitations contained in Condition D.4.1(a) 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 "as supplied" and "as applied" VOC data sheets. IDEM, OAQ reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.
- (b) For daily volume weighted average option  
Compliance with the VOC content limit in Condition D.4.1(a) , when using non compliant coating, shall be determined pursuant to 326 IAC 8-1-2(a)(7), using a volume weighted average of coatings on a daily basis. This volume weighted average shall be determined by the following equation:

$$A = [ \sum (c \times U) / \sum U ]$$

Where:

A is the volume weighted average in pounds VOC per gallon less water as applied;

C is the VOC content of the coating in pounds VOC per gallon less water as applied; and

U is the usage rate of the coating in gallons per day.

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

#### D.4.3 Record Keeping Requirements

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- (a) When compliant coating option is used  
To document compliance with Condition D.4.1(a), the Permittee shall maintain records in accordance with (1) through (4) below when compliant coating is used. Records maintained for (1) through (4) shall be taken as stated below and shall be complete and sufficient to establish compliance with the VOC usage limit established in Condition D.4.1(a).
  - (1) The VOC content of each coating material and solvent used less water.
  - (2) The amount of coating material and solvent used on daily 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 solvent.

- (3) The daily cleanup solvent usage; and
  - (4) The total VOC usage for each day.
- (b) When daily volume weighted average option is used  
To document compliance with Condition D.4.1(a), the Permittee shall maintain records in accordance with (1) through (5) below when Daily volume weighted average option is used. Records maintained for (1) through (5) shall be taken as stated below and shall be complete and sufficient to establish compliance with the VOC usage limit established in Condition D.4.1(a).
- (1) The VOC content of each coating material and solvent used less water.
  - (2) The amount of coating material and solvent used on daily 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 solvent.
  - (3) The volume weighted average VOC content of the coatings used for each day;
  - (4) The daily cleanup solvent usage; and
  - (5) The total VOC usage for each day.
- (c) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the record keeping required by this condition.

**SECTION D.5 EMISSIONS UNIT OPERATION CONDITIONS**

**Emissions Unit Description: Shot Peeners**

- (f) Six (6) Shot Peeners, which include the following units:
- (1) Pangborn Shot Peener, identified as 3-1804, with a maximum capacity of 0.012 tons steel shots used per hour, using a baghouse, identified as 3-3017, as control, constructed in 1964, and venting inside.
  - (2) Wheelabrator Shot Peener, identified as 3-1821, with a maximum capacity of 0.12 tons steel shots used per hour, using a baghouse, identified as 3-3022, as control, constructed in 1972, and venting inside.
  - (3) Wheelabrator Shot Peener, identified as 3-1823, with a maximum capacity of 0.21 tons steel shots used per hour, using a baghouse, identified as 3-1823, as control, constructed in 1980, and exhausting to Stack 12.
  - (4) One (1) Shot Peener, identified as 3-1824, constructed in 2011, with a maximum capacity of 5.15 tons steel parts used per hour, using a baghouse, identified as 3-3024, for control of particulate matter emissions, and venting inside.
  - (5) One (1) Shot Peener, identified as 3-1825, constructed in 2011, with a maximum capacity of 5.15 tons steel parts used per hour, using a baghouse, identified as 3-3025, for control of particulate matter emissions, and venting inside.
  - (6) One (1) Shot Peener, identified as 3-1826, constructed in 2012, with a maximum capacity of 5.25 tons of steel parts per hour, using a baghouse, identified as 3-1826A, for particulate matter control, and venting inside.

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

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

**D.5.1 Particulate Matter less than 10 microns in diameter (PM10) [326 IAC 6.8-2]**

Pursuant to 326 IAC 6.8-2-4(a) (Lake County: PM10 Emission Requirements), PM10 emissions after control from the facilities listed below shall not exceed the limits as specified below.

Facility	ID	PM10 Emission Limit (lb/ton)	PM10 Emission Limit (lb/hr)
Pangborn Shot Peener	3-1804	0.011	0.06
Wheelabrator Shot Peener	3-1821	0.016	0.06
Wheelabrator Shot Peener	3-1823	0.016	0.06

**D.5.2 Particulate Matter Limitations for Lake County [326 IAC 6.8-1-2]**

Pursuant to 326 IAC 6.8-1-2(a) (Particulate Matter Limitations for Lake County), the PM emissions after control from the facilities listed below shall not exceed the limits as specified below.

Emission Unit	ID	PM Emission Limit (grains/dscf)
Shot Peener	3-1824	0.03
	3-1825	0.03
	3-1826	0.03

**D.5.3 PSD Minor Limits [326 IAC 2-2]**

In order to render the requirements of 326 IAC 2-2 not applicable, the Permittee shall comply with the following:

<b>Emission Unit</b>	<b>ID</b>	<b>PM Limit (lb/hr)</b>	<b>PM10 Limit (lb/hr)</b>	<b>PM2.5 Limit (lb/hr)</b>
Pangborn ShotPeener	3-1804	0.99	0.06	0.06
Wheelabrator Shot Peener	3-1821	0.99	0.06	0.06
Wheelabrator Shot Peener	3-1823	0.99	0.06	0.06
Shot Peener	3-1824	0.99	0.99	0.99
Shot Peener	3-1825	0.99	0.99	0.99
Shot Peener	3-1826	1.03	1.03	1.03

Compliance with these limits combined with the limits in Conditions D.1.3 and D.2.3, and the unrestricted potential to emit of PM, PM10 and PM2.5 from all other equipment at this source will limit the potential to emit of PM, PM10 and PM2.5 from the entire source to less than two hundred fifty (250) tons per year, each, and render 326 IAC 2-2 not applicable.

**D.5.4 Preventive Maintenance Plan [326 IAC 2-7-5(12)]**

A Preventive Maintenance Plan (PMP) is required for these facilities and its control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligations with regard to the preventive maintenance plan required by this condition.

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

**D.5.5 Particulate Control [326 IAC 6.8-2] [326 IAC 2-7-6(6)] [326 IAC 2-1.1-5]**

- (a) In order to comply with Conditions D.5.1, D.5.2 and D.5.3, the particulate control devices equipped on the emission units listed in Conditions D.5.1, D.5.2 and D.5.3 shall be in operation and control emissions from its associated emission unit at all times that the associated emission unit is in operation.
- (b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification. If the failed compartment can be isolated and testing has confirmed that compliance can be achieved with one compartment down, this notification is not required.

**D.5.6 Testing Requirements [326 IAC 2-1.1-11]**

- (a) In order to demonstrate the compliance status with Conditions D.5.1, D.5.2 and D.5.3, the Permittee shall perform PM, PM10, and PM2.5 testing on any two (2) of the Shot Peeners listed below no later than no later than five (5) years of the most recent testing performed on Shot Peener 3-1824.

<b>Emission Unit</b>	<b>ID</b>
Pangborn ShotPeener	3-1804
Wheelabrator Shot Peener	3-1821
Wheelabrator Shot Peener	3-1823
Shot Peener	3-1824
Shot Peener	3-1825
Shot Peener	3-1826

The testing shall be repeated every five (5) years on any two (2) of the Shot Peeners mentioned above such that the time period between tests on each unit does not exceed fifteen (15) years.

PM10 and PM2.5 includes filterable and condensable PM.

- (b) In order to demonstrate the compliance status with Condition D.5.3, the Permittee shall perform PM, PM10, and PM2.5 testing on Shot Peener (3-1826) within sixty (60) days of reaching maximum capacity but no later than one hundred and eighty (180) days after initial startup of Shot Peener (3-1826).

PM10 and PM2.5 includes filterable and condensable PM.

- (c) Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

## SECTION D.6 EMISSIONS UNIT OPERATION CONDITIONS

### Emissions Unit Description: Degreasers

#### Insignificant Activities

- (c) Two (2) Cold Cleaner Degreasers, each with maximum capacity of 0.06 gallons per hour, with solvent not remotely stored, not heated, or agitated and solvent spray is not used.

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

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

#### D.6.1 Volatile Organic Compounds (VOC) [326 IAC 8-3]

- (a) Pursuant to 326 IAC 8-3-2(a), Permittee shall comply with the following:
- (1) Equip the degreaser with a cover.
  - (2) Equip the degreaser with a device for draining cleaned parts.
  - (3) Close the degreaser cover whenever parts are not being handled in the degreaser.
  - (4) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases.
  - (5) Provide a permanent, conspicuous label that lists the operating requirements in items (3), (4), (6), and (7).
  - (6) Store waste solvent only in closed containers.
  - (7) Prohibit the disposal or transfer of waste solvent in such a manner that could allow greater than twenty percent (20%) of the waste solvent (by weight) to evaporate into the atmosphere.
- (b) Pursuant to 326 IAC 8-3-8(b), Permittee shall not shall operate a cold cleaner degreaser with a solvent that has a VOC composite partial vapor pressure that exceeds one (1) millimeter of mercury (nineteen-thousandths (0.019) pound per square inch) measured at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).
- (c) Pursuant to 326 IAC 8-3-8(c), Permittee shall maintain each of the following records for each solvent purchase:
- (A) The name and address of the solvent supplier.
  - (B) The date of purchase (or invoice/bill date of contract servicer indicating service date).
  - (C) The type of solvent purchased.
  - (D) The total volume of the solvent purchased.
  - (E) The true vapor pressure of the solvent measured in millimeters of mercury at twenty (20) degrees Celsius (sixtyeight (68) degrees Fahrenheit).
- (d) Pursuant to 326 IAC 8-3-8(d), all the records specified in paragraph (c) above shall be retained on-site or accessible electronically from the site for the most recent three (3) year period, and reasonably accessible for an additional two (2) year period.

## SECTION E.1 EMISSIONS UNIT OPERATION CONDITIONS

### **Emissions Unit Description:** Gasoline Fuel Transfer Dispensing

- (h) A gasoline fuel transfer dispensing operation handling less than or equal to one thousand three hundred (1,300) gallons per day and filling storage tanks having a capacity of less than ten thousand five hundred (10,500) gallons. Such storage tanks may be in a fixed location or on mobile equipment.

Under 40 CFR 63, Subpart CCCCCC, it is considered an existing affected source.

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

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

- (a) Pursuant to 40 CFR 63.1, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference as 326 IAC 20-1, except as otherwise specified in 40 CFR 63, Subpart CCCCCC.

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

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

and

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

#### E.1.2 National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities [40 CFR Part 63, Subpart CCCCCC]

The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart CCCCCC (included as Attachment B of this permit), for the gasoline fuel transfer dispensing operation, except as otherwise specified in 40 CFR Part 63, Subpart CCCCCC.

- (1) 40 CFR 63.11110
- (2) 40 CFR 63.11111
- (3) 40 CFR 63.11112
- (4) 40 CFR 63.11113(b)
- (5) 40 CFR 63.11115
- (6) 40 CFR 63.11116
- (7) 40 CFR 63.11130
- (8) 40 CFR 63.11132

## SECTION E.2 FACILITY OPERATION CONDITIONS

### **Emissions Unit Description:** Emergency Fire Pump Engine

#### Insignificant Activities:

- (b) One (1) 130-hp emergency fire pump diesel engine, constructed in 1947.

Under 40 CFR 63, Subpart ZZZZ, the emergency fire pump engine considered existing RICE.

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

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

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

The provisions of 40 CFR Part 63 Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the emergency fire pump engine, except when otherwise specified in 40 CFR Part 63 Subpart ZZZZ.

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

Pursuant to CFR Part 63, Subpart ZZZZ, the Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart ZZZZ (included as 'Attachment C'), which are incorporated by reference as 326 IAC 20-82 for the emergency fire pump engine:

- (1) 40 CFR 63.6580
- (2) 40 CFR 63.6585(a) and (c)
- (3) 40 CFR 63.6590(a)(1)
- (4) 40 CFR 63.6595(a)(1)
- (5) 40 CFR 63.6603(a)
- (6) 40 CFR 63.6604
- (7) 40 CFR 63.6605
- (8) 40 CFR 63.6625(e)(3) and (f)
- (9) 40 CFR 63.6645(a)(5)
- (10) 40 CFR 63.6660
- (11) 40 CFR 63.6665
- (12) 40 CFR 63.6670
- (13) 40 CFR 63.6675

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

Source Name: Amsted Rail Company, Inc.  
Source Address: 4831 Hohman Avenue, Hammond, Indiana 46327  
Part 70 Permit No.: 089-33178-00204

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

Please check what document is being certified:

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

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

Signature:

Printed Name:

Title/Position:

Phone:

Date:

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

**PART 70 OPERATING PERMIT**  
**EMERGENCY OCCURRENCE REPORT**

Source Name: Amsted Rail Company, Inc.  
Source Address: 4831 Hohman Avenue, Hammond, Indiana 46327  
Part 70 Permit No.: 089-33178-00204

**This form consists of 2 pages**

**Page 1 of 2**

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

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

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

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

**Page 2 of 2**

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

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

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

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

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

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

Source Name: Amsted Rail Company, Inc.  
 Source Address: 4831 Hohman Avenue, Hammond, Indiana 46327  
 Part 70 Permit No.: 089-33178-00204

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

This report shall be submitted quarterly based on a calendar year. Proper notice submittal under Section B –Emergency Provisions satisfies the reporting requirements of paragraph (a) of Section C- General Reporting. Any deviation from the requirements of this permit, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".	
<input type="checkbox"/> NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.	
<input type="checkbox"/> THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD	
<b>Permit Requirement</b> (specify permit condition #)	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	
<b>Permit Requirement</b> (specify permit condition #)	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	

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

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

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

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

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

**Attachment A**

**FUGITIVE DUST CONTROL PLAN**

**Amsted Rail Company, Inc.  
4831 Hohman Avenue  
Hammond, Indiana 46327**

**Permit Renewal No.: 089-33178-00204**

March 21, 2014

<b>PLANT CONTACTS:</b>	<b>POSITION</b>	<b>PHONE</b>
J. Gomez	Operations Manager	219-931-1900, x13212
J. Herrera	Maintenance Manager	219-931-1900, x13231
Larry Moore	EHS Manager	219-931-1900,x13212

**A) Name and Address of Source:**

Amsted Rail Company, Inc.  
4831 Hohman Ave.  
Hammond, IN 46327

**B) Name and Address of Source Owner:**

Amsted Rail Company, Inc.  
311 South Wacker Drive, Suite 5300  
Chicago, IL 60606  
312-922-4501

**C) Applicable Operations (with Permit Section References)**

**1) Paved Roads - C.5(a)**

All roadways within the boundaries of Amsted Rail Company, Inc. (Amsted Rail) are paved. The current configuration of the roadways within the plant proper, along with plant rules, limit speed to 5 miles per hour.

**2) Unpaved Roads – C.5(b)**

There exist no unpaved roads within the boundaries of Amsted Rail.

**3) Batch Transfer – C.5(c)**

Amsted Rail has no facility or operation in which batch transfer takes place.

**4) Transfer Of Material Onto And Out Of Storage Piles – C.5(d)**

Amsted Rail places waste directly into a roll off box. The waste is composed steel scale, too heavy to become airborne, and dust from grinding and shotpeening operations. The dust is stored in bags.

**5) Inplant Transportation Of Material By Truck Or Rail – C.5(f)**

While Amsted Rail engages in transportation of material inplant, neither the material, the roadway, nor the vehicle used produce visible fugitive dust. There are no rail operations.

**6) Inplant Transportation of Material by Front-end Loaders and Skip Hoists – C.5(g)**

Amsted Rail has no operation involving inplant transportation of material by front-end loaders and/or skip hoists.

**7) Building Enclosing All Or Part Of The Material Processing Large Line – C.5(h)**

Amsted Rail recognizes a potential for fugitive emissions from its fabric filters. This potential will be addressed by compliance with the applicable requirements of the Permit (Sections D.3.2, D.3.4, D.3.5).

**8) PM<sub>10</sub> Emissions from Building Vents – C.5(i)**

Please see number 8 above.

**9) Dust Handling Equipment – C.5(j)**

All dust created by grinding and shotpeening is confined to bags. The bags are transported to the concrete pad for temporary storage of special waste.

**10) Any Facility or Operation not Specified in 326 IAC 6.8-10-3**

Amsted Rail does not have any other facility or operation, other than those specified in numbers 1 through 10 above, that have the potential for producing fugitive dust emissions.

**Attachment B**

**NESHAP 40 CFR Part 63, Subpart CCCCC**

**Permit Renewal No.: 089-33178-00204**

## **PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES (CONTINUED)**

### **Subpart CCCCCC—National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities**

**Source:** 73 FR 1945, Jan. 10, 2008, unless otherwise noted.

#### **What This Subpart Covers**

#### **§ 63.11110 What is the purpose of this subpart?**

This subpart establishes national emission limitations and management practices for hazardous air pollutants (HAP) emitted from the loading of gasoline storage tanks at gasoline dispensing facilities (GDF). This subpart also establishes requirements to demonstrate compliance with the emission limitations and management practices.

#### **§ 63.11111 Am I subject to the requirements in this subpart?**

(a) The affected source to which this subpart applies is each GDF that is located at an area source. The affected source includes each gasoline cargo tank during the delivery of product to a GDF and also includes each storage tank.

(b) If your GDF has a monthly throughput of less than 10,000 gallons of gasoline, you must comply with the requirements in §63.11116.

(c) If your GDF has a monthly throughput of 10,000 gallons of gasoline or more, you must comply with the requirements in §63.11117.

(d) If your GDF has a monthly throughput of 100,000 gallons of gasoline or more, you must comply with the requirements in §63.11118.

(e) An affected source shall, upon request by the Administrator, demonstrate that their monthly throughput is less than the 10,000-gallon or the 100,000-gallon threshold level, as applicable. For new or reconstructed affected sources, as specified in §63.11112(b) and (c), recordkeeping to document monthly throughput must begin upon startup of the affected source. For existing sources, as specified in §63.11112(d), recordkeeping to document monthly throughput must begin on January 10, 2008. For existing sources that are subject to this subpart only because they load gasoline into fuel tanks other than those in motor vehicles, as defined in §63.11132, recordkeeping to document monthly throughput must begin on January 24, 2011. Records required under this paragraph shall be kept for a period of 5 years.

(f) If you are an owner or operator of affected sources, as defined in paragraph (a) of this section, you are not required to obtain a permit under 40 CFR part 70 or 40 CFR part 71 as a result of being subject to this subpart. However, you must still apply for and obtain a permit under 40 CFR part 70 or 40 CFR part 71 if you meet one or more of the applicability criteria found in 40 CFR 70.3(a) and (b) or 40 CFR 71.3(a) and (b).

(g) The loading of aviation gasoline into storage tanks at airports, and the subsequent transfer of aviation gasoline within the airport, is not subject to this subpart.

(h) Monthly throughput is the total volume of gasoline loaded into, or dispensed from, all the gasoline storage tanks located at a single affected GDF. If an area source has two or more GDF at separate locations within the area source, each GDF is treated as a separate affected source.

(i) If your affected source's throughput ever exceeds an applicable throughput threshold, the affected source will remain subject to the requirements for sources above the threshold, even if the affected source throughput later falls below the applicable throughput threshold.

(j) The dispensing of gasoline from a fixed gasoline storage tank at a GDF into a portable gasoline tank for the on-site delivery and subsequent dispensing of the gasoline into the fuel tank of a motor vehicle or other gasoline-fueled engine or equipment used within the area source is only subject to §63.11116 of this subpart.

(k) For any affected source subject to the provisions of this subpart and another Federal rule, you may elect to comply only with the more stringent provisions of the applicable subparts. You must consider all provisions of the rules, including monitoring, recordkeeping, and reporting. You must identify the affected source and provisions with which you will comply in your Notification of Compliance Status required under §63.11124. You also must demonstrate in your Notification of Compliance Status that each provision with which you will comply is at least as stringent as the otherwise applicable requirements in this subpart. You are responsible for making accurate determinations concerning the more stringent provisions, and noncompliance with this rule is not excused if it is later determined that your determination was in error, and, as a result, you are violating this subpart. Compliance with this rule is your responsibility and the Notification of Compliance Status does not alter or affect that responsibility.

[73 FR 1945, Jan. 10, 2008, as amended at 76 FR 4181, Jan. 24, 2011]

#### **§ 63.11112 What parts of my affected source does this subpart cover?**

(a) The emission sources to which this subpart applies are gasoline storage tanks and associated equipment components in vapor or liquid gasoline service at new, reconstructed, or existing GDF that meet the criteria specified in §63.11111. Pressure/Vacuum vents on gasoline storage tanks and the equipment necessary to unload product from cargo tanks into the storage tanks at GDF are covered emission sources. The equipment used for the refueling of motor vehicles is not covered by this subpart.

(b) An affected source is a new affected source if you commenced construction on the affected source after November 9, 2006, and you meet the applicability criteria in §63.11111 at the time you commenced operation.

(c) An affected source is reconstructed if you meet the criteria for reconstruction as defined in §63.2.

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

#### **§ 63.11113 When do I have to comply with this subpart?**

(a) If you have a new or reconstructed affected source, you must comply with this subpart according to paragraphs (a)(1) and (2) of this section, except as specified in paragraph (d) of this section.

(1) If you start up your affected source before January 10, 2008, you must comply with the standards in this subpart no later than January 10, 2008.

(2) If you start up your affected source after January 10, 2008, you must comply with the standards in this subpart upon startup of your affected source.

(b) If you have an existing affected source, you must comply with the standards in this subpart no later than January 10, 2011.

(c) If you have an existing affected source that becomes subject to the control requirements in this subpart because of an increase in the monthly throughput, as specified in §63.11111(c) or §63.11111(d), you must comply with the standards in this subpart no later than 3 years after the affected source becomes subject to the control requirements in this subpart.

(d) If you have a new or reconstructed affected source and you are complying with Table 1 to this subpart, you must comply according to paragraphs (d)(1) and (2) of this section.

(1) If you start up your affected source from November 9, 2006 to September 23, 2008, you must comply no later than September 23, 2008.

(2) If you start up your affected source after September 23, 2008, you must comply upon startup of your affected source.

(e) The initial compliance demonstration test required under §63.11120(a)(1) and (2) must be conducted as specified in paragraphs (e)(1) and (2) of this section.

(1) If you have a new or reconstructed affected source, you must conduct the initial compliance test upon installation of the complete vapor balance system.

(2) If you have an existing affected source, you must conduct the initial compliance test as specified in paragraphs (e)(2)(i) or (e)(2)(ii) of this section.

(i) For vapor balance systems installed on or before December 15, 2009, you must test no later than 180 days after the applicable compliance date specified in paragraphs (b) or (c) of this section.

(ii) For vapor balance systems installed after December 15, 2009, you must test upon installation of the complete vapor balance system.

(f) If your GDF is subject to the control requirements in this subpart only because it loads gasoline into fuel tanks other than those in motor vehicles, as defined in §63.11132, you must comply with the standards in this subpart as specified in paragraphs (f)(1) or (f)(2) of this section.

(1) If your GDF is an existing facility, you must comply by January 24, 2014.

(2) If your GDF is a new or reconstructed facility, you must comply by the dates specified in paragraphs (f)(2)(i) and (ii) of this section.

(i) If you start up your GDF after December 15, 2009, but before January 24, 2011, you must comply no later than January 24, 2011.

(ii) If you start up your GDF after January 24, 2011, you must comply upon startup of your GDF.

[73 FR 1945, Jan. 10, 2008, as amended at 73 FR 35944, June 25, 2008; 76 FR 4181, Jan. 24, 2011]

## **Emission Limitations and Management Practices**

### **§ 63.11115 What are my general duties to minimize emissions?**

Each owner or operator of an affected source under this subpart must comply with the requirements of paragraphs (a) and (b) of this section.

(a) You must, at all times, operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

(b) You must keep applicable records and submit reports as specified in §63.11125(d) and §63.11126(b).

[76 FR 4182, Jan. 24, 2011]

**§ 63.11116 Requirements for facilities with monthly throughput of less than 10,000 gallons of gasoline.**

(a) You must not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following:

- (1) Minimize gasoline spills;
- (2) Clean up spills as expeditiously as practicable;
- (3) Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use;
- (4) Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.

(b) You are not required to submit notifications or reports as specified in §63.11125, §63.11126, or subpart A of this part, but you must have records available within 24 hours of a request by the Administrator to document your gasoline throughput.

(c) You must comply with the requirements of this subpart by the applicable dates specified in §63.11113.

(d) Portable gasoline containers that meet the requirements of 40 CFR part 59, subpart F, are considered acceptable for compliance with paragraph (a)(3) of this section.

[73 FR 1945, Jan. 10, 2008, as amended at 76 FR 4182, Jan. 24, 2011]

**§ 63.11117 Requirements for facilities with monthly throughput of 10,000 gallons of gasoline or more.**

(a) You must comply with the requirements in section §63.11116(a).

(b) Except as specified in paragraph (c) of this section, you must only load gasoline into storage tanks at your facility by utilizing submerged filling, as defined in §63.11132, and as specified in paragraphs (b)(1), (b)(2), or (b)(3) of this section. The applicable distances in paragraphs (b)(1) and (2) shall be measured from the point in the opening of the submerged fill pipe that is the greatest distance from the bottom of the storage tank.

(1) Submerged fill pipes installed on or before November 9, 2006, must be no more than 12 inches from the bottom of the tank.

(2) Submerged fill pipes installed after November 9, 2006, must be no more than 6 inches from the bottom of the tank.

(3) Submerged fill pipes not meeting the specifications of paragraphs (b)(1) or (b)(2) of this section are allowed if the owner or operator can demonstrate that the liquid level in the tank is always above the entire opening of the fill pipe. Documentation providing such demonstration must be made available for inspection by the Administrator's delegated representative during the course of a site visit.

(c) Gasoline storage tanks with a capacity of less than 250 gallons are not required to comply with the submerged fill requirements in paragraph (b) of this section, but must comply only with all of the requirements in §63.11116.

(d) You must have records available within 24 hours of a request by the Administrator to document your gasoline throughput.

(e) You must submit the applicable notifications as required under §63.11124(a).

(f) You must comply with the requirements of this subpart by the applicable dates contained in §63.11113.

[73 FR 1945, Jan. 10, 2008, as amended at 73 FR 12276, Mar. 7, 2008; 76 FR 4182, Jan. 24, 2011]

**§ 63.11118 Requirements for facilities with monthly throughput of 100,000 gallons of gasoline or more.**

(a) You must comply with the requirements in §§63.11116(a) and 63.11117(b).

(b) Except as provided in paragraph (c) of this section, you must meet the requirements in either paragraph (b)(1) or paragraph (b)(2) of this section.

(1) Each management practice in Table 1 to this subpart that applies to your GDF.

(2) If, prior to January 10, 2008, you satisfy the requirements in both paragraphs (b)(2)(i) and (ii) of this section, you will be deemed in compliance with this subsection.

(i) You operate a vapor balance system at your GDF that meets the requirements of either paragraph (b)(2)(i)(A) or paragraph (b)(2)(i)(B) of this section.

(A) Achieves emissions reduction of at least 90 percent.

(B) Operates using management practices at least as stringent as those in Table 1 to this subpart.

(ii) Your gasoline dispensing facility is in compliance with an enforceable State, local, or tribal rule or permit that contains requirements of either paragraph (b)(2)(i)(A) or paragraph (b)(2)(i)(B) of this section.

(c) The emission sources listed in paragraphs (c)(1) through (3) of this section are not required to comply with the control requirements in paragraph (b) of this section, but must comply with the requirements in §63.11117.

(1) Gasoline storage tanks with a capacity of less than 250 gallons that are constructed after January 10, 2008.

(2) Gasoline storage tanks with a capacity of less than 2,000 gallons that were constructed before January 10, 2008.

(3) Gasoline storage tanks equipped with floating roofs, or the equivalent.

(d) Cargo tanks unloading at GDF must comply with the management practices in Table 2 to this subpart.

(e) You must comply with the applicable testing requirements contained in §63.11120.

(f) You must submit the applicable notifications as required under §63.11124.

(g) You must keep records and submit reports as specified in §§63.11125 and 63.11126.

(h) You must comply with the requirements of this subpart by the applicable dates contained in §63.11113.

[73 FR 1945, Jan. 10, 2008, as amended at 73 FR 12276, Mar. 7, 2008]

## Testing and Monitoring Requirements

### § 63.11120 What testing and monitoring requirements must I meet?

(a) Each owner or operator, at the time of installation, as specified in §63.11113(e), of a vapor balance system required under §63.11118(b)(1), and every 3 years thereafter, must comply with the requirements in paragraphs (a)(1) and (2) of this section.

(1) You must demonstrate compliance with the leak rate and cracking pressure requirements, specified in item 1(g) of Table 1 to this subpart, for pressure-vacuum vent valves installed on your gasoline storage tanks using the test methods identified in paragraph (a)(1)(i) or paragraph (a)(1)(ii) of this section.

(i) California Air Resources Board Vapor Recovery Test Procedure TP–201.1E,—Leak Rate and Cracking Pressure of Pressure/Vacuum Vent Valves, adopted October 8, 2003 (incorporated by reference, see §63.14).

(ii) Use alternative test methods and procedures in accordance with the alternative test method requirements in §63.7(f).

(2) You must demonstrate compliance with the static pressure performance requirement specified in item 1(h) of Table 1 to this subpart for your vapor balance system by conducting a static pressure test on your gasoline storage tanks using the test methods identified in paragraphs (a)(2)(i), (a)(2)(ii), or (a)(2)(iii) of this section.

(i) California Air Resources Board Vapor Recovery Test Procedure TP–201.3,—Determination of 2-Inch WC Static Pressure Performance of Vapor Recovery Systems of Dispensing Facilities, adopted April 12, 1996, and amended March 17, 1999 (incorporated by reference, see §63.14).

(ii) Use alternative test methods and procedures in accordance with the alternative test method requirements in §63.7(f).

(iii) Bay Area Air Quality Management District Source Test Procedure ST–30—Static Pressure Integrity Test—Underground Storage Tanks, adopted November 30, 1983, and amended December 21, 1994 (incorporated by reference, see §63.14).

(b) Each owner or operator choosing, under the provisions of §63.6(g), to use a vapor balance system other than that described in Table 1 to this subpart must demonstrate to the Administrator or delegated authority under paragraph §63.11131(a) of this subpart, the equivalency of their vapor balance system to that described in Table 1 to this subpart using the procedures specified in paragraphs (b)(1) through (3) of this section.

(1) You must demonstrate initial compliance by conducting an initial performance test on the vapor balance system to demonstrate that the vapor balance system achieves 95 percent reduction using the California Air Resources Board Vapor Recovery Test Procedure TP–201.1,—Volumetric Efficiency for Phase I Vapor Recovery Systems, adopted April 12, 1996, and amended February 1, 2001, and October 8, 2003, (incorporated by reference, see §63.14).

(2) You must, during the initial performance test required under paragraph (b)(1) of this section, determine and document alternative acceptable values for the leak rate and cracking pressure requirements specified in item 1(g) of Table 1 to this subpart and for the static pressure performance requirement in item 1(h) of Table 1 to this subpart.

(3) You must comply with the testing requirements specified in paragraph (a) of this section.

(c) Conduct of performance tests. Performance tests conducted for this subpart shall be conducted under such conditions as the Administrator specifies to the owner or operator based on representative performance ( *i.e.*, performance based on normal operating conditions) of the affected source. Upon request, the owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

(d) Owners and operators of gasoline cargo tanks subject to the provisions of Table 2 to this subpart must conduct annual certification testing according to the vapor tightness testing requirements found in §63.11092(f).

[73 FR 1945, Jan. 10, 2008, as amended at 76 FR 4182, Jan. 24, 2011]

## Notifications, Records, and Reports

### § 63.11124 What notifications must I submit and when?

(a) Each owner or operator subject to the control requirements in §63.11117 must comply with paragraphs (a)(1) through (3) of this section.

(1) You must submit an Initial Notification that you are subject to this subpart by May 9, 2008, or at the time you become subject to the control requirements in §63.11117, unless you meet the requirements in paragraph (a)(3) of this section. If your affected source is subject to the control requirements in §63.11117 only because it loads gasoline into fuel tanks other than those in motor vehicles, as defined in §63.11132, you must submit the Initial Notification by May 24, 2011. The Initial Notification must contain the information specified in paragraphs (a)(1)(i) through (iii) of this section. The notification must be submitted to the applicable EPA Regional Office and delegated State authority as specified in §63.13.

(i) The name and address of the owner and the operator.

(ii) The address (i.e., physical location) of the GDF.

(iii) A statement that the notification is being submitted in response to this subpart and identifying the requirements in paragraphs (a) through (c) of §63.11117 that apply to you.

(2) You must submit a Notification of Compliance Status to the applicable EPA Regional Office and the delegated State authority, as specified in §63.13, within 60 days of the applicable compliance date specified in §63.11113, unless you meet the requirements in paragraph (a)(3) of this section. The Notification of Compliance Status must be signed by a responsible official who must certify its accuracy, must indicate whether the source has complied with the requirements of this subpart, and must indicate whether the facilities' monthly throughput is calculated based on the volume of gasoline loaded into all storage tanks or on the volume of gasoline dispensed from all storage tanks. If your facility is in compliance with the requirements of this subpart at the time the Initial Notification required under paragraph (a)(1) of this section is due, the Notification of Compliance Status may be submitted in lieu of the Initial Notification provided it contains the information required under paragraph (a)(1) of this section.

(3) If, prior to January 10, 2008, you are operating in compliance with an enforceable State, local, or tribal rule or permit that requires submerged fill as specified in §63.11117(b), you are not required to submit an Initial Notification or a Notification of Compliance Status under paragraph (a)(1) or paragraph (a)(2) of this section.

(b) Each owner or operator subject to the control requirements in §63.11118 must comply with paragraphs (b)(1) through (5) of this section.

(1) You must submit an Initial Notification that you are subject to this subpart by May 9, 2008, or at the time you become subject to the control requirements in §63.11118. If your affected source is subject to the control requirements in §63.11118 only because it loads gasoline into fuel tanks other than those in motor vehicles, as defined in §63.11132, you must submit the Initial Notification by May 24, 2011. The Initial

Notification must contain the information specified in paragraphs (b)(1)(i) through (iii) of this section. The notification must be submitted to the applicable EPA Regional Office and delegated State authority as specified in §63.13.

(i) The name and address of the owner and the operator.

(ii) The address (i.e., physical location) of the GDF.

(iii) A statement that the notification is being submitted in response to this subpart and identifying the requirements in paragraphs (a) through (c) of §63.11118 that apply to you.

(2) You must submit a Notification of Compliance Status to the applicable EPA Regional Office and the delegated State authority, as specified in §63.13, in accordance with the schedule specified in §63.9(h). The Notification of Compliance Status must be signed by a responsible official who must certify its accuracy, must indicate whether the source has complied with the requirements of this subpart, and must indicate whether the facility's throughput is determined based on the volume of gasoline loaded into all storage tanks or on the volume of gasoline dispensed from all storage tanks. If your facility is in compliance with the requirements of this subpart at the time the Initial Notification required under paragraph (b)(1) of this section is due, the Notification of Compliance Status may be submitted in lieu of the Initial Notification provided it contains the information required under paragraph (b)(1) of this section.

(3) If, prior to January 10, 2008, you satisfy the requirements in both paragraphs (b)(3)(i) and (ii) of this section, you are not required to submit an Initial Notification or a Notification of Compliance Status under paragraph (b)(1) or paragraph (b)(2) of this subsection.

(i) You operate a vapor balance system at your gasoline dispensing facility that meets the requirements of either paragraphs (b)(3)(i)(A) or (b)(3)(i)(B) of this section.

(A) Achieves emissions reduction of at least 90 percent.

(B) Operates using management practices at least as stringent as those in Table 1 to this subpart.

(ii) Your gasoline dispensing facility is in compliance with an enforceable State, local, or tribal rule or permit that contains requirements of either paragraphs (b)(3)(i)(A) or (b)(3)(i)(B) of this section.

(4) You must submit a Notification of Performance Test, as specified in §63.9(e), prior to initiating testing required by §63.11120(a) and (b).

(5) You must submit additional notifications specified in §63.9, as applicable.

[73 FR 1945, Jan. 10, 2008, as amended at 73 FR 12276, Mar. 7, 2008; 76 FR 4182, Jan. 24, 2011]

### **§ 63.11125 What are my recordkeeping requirements?**

(a) Each owner or operator subject to the management practices in §63.11118 must keep records of all tests performed under §63.11120(a) and (b).

(b) Records required under paragraph (a) of this section shall be kept for a period of 5 years and shall be made available for inspection by the Administrator's delegated representatives during the course of a site visit.

(c) Each owner or operator of a gasoline cargo tank subject to the management practices in Table 2 to this subpart must keep records documenting vapor tightness testing for a period of 5 years. Documentation must include each of the items specified in §63.11094(b)(2)(i) through (viii). Records of vapor tightness testing must be retained as specified in either paragraph (c)(1) or paragraph (c)(2) of this section.

- (1) The owner or operator must keep all vapor tightness testing records with the cargo tank.
- (2) As an alternative to keeping all records with the cargo tank, the owner or operator may comply with the requirements of paragraphs (c)(2)(i) and (ii) of this section.
- (i) The owner or operator may keep records of only the most recent vapor tightness test with the cargo tank, and keep records for the previous 4 years at their office or another central location.
- (ii) Vapor tightness testing records that are kept at a location other than with the cargo tank must be instantly available ( e.g., via e-mail or facsimile) to the Administrator's delegated representative during the course of a site visit or within a mutually agreeable time frame. Such records must be an exact duplicate image of the original paper copy record with certifying signatures.
- (d) Each owner or operator of an affected source under this subpart shall keep records as specified in paragraphs (d)(1) and (2) of this section.
- (1) Records of the occurrence and duration of each malfunction of operation ( i.e., process equipment) or the air pollution control and monitoring equipment.
- (2) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.11115(a), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

[73 FR 1945, Jan. 10, 2008, as amended at 76 FR 4183, Jan. 24, 2011]

#### **§ 63.11126 What are my reporting requirements?**

- (a) Each owner or operator subject to the management practices in §63.11118 shall report to the Administrator the results of all volumetric efficiency tests required under §63.11120(b). Reports submitted under this paragraph must be submitted within 180 days of the completion of the performance testing.
- (b) Each owner or operator of an affected source under this subpart shall report, by March 15 of each year, the number, duration, and a brief description of each type of malfunction which occurred during the previous calendar year and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with §63.11115(a), including actions taken to correct a malfunction. No report is necessary for a calendar year in which no malfunctions occurred.

[76 FR 4183, Jan. 24, 2011]

#### **Other Requirements and Information**

##### **§ 63.11130 What parts of the General Provisions apply to me?**

Table 3 to this subpart shows which parts of the General Provisions apply to you.

##### **§ 63.11131 Who implements and enforces this subpart?**

- (a) This subpart can be implemented and enforced by the U.S. EPA or a delegated authority such as the applicable State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to a State, local, or tribal agency, then that agency, in addition to the U.S. EPA, has the authority to implement and enforce this subpart. Contact the applicable U.S. EPA Regional Office to find out if implementation and enforcement of this subpart is delegated to a State, local, or tribal agency.

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

(c) The authorities that cannot be delegated to State, local, or tribal agencies are as specified in paragraphs (c)(1) through (3) of this section.

(1) Approval of alternatives to the requirements in §§63.11116 through 63.11118 and 63.11120.

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

(3) Approval of major alternatives to recordkeeping and reporting under §63.10(f), as defined in §63.90, and as required in this subpart.

### **§ 63.11132 What definitions apply to this subpart?**

As used in this subpart, all terms not defined herein shall have the meaning given them in the Clean Air Act (CAA), or in subparts A and BBBBBB of this part. For purposes of this subpart, definitions in this section supersede definitions in other parts or subparts.

*Dual-point vapor balance system* means a type of vapor balance system in which the storage tank is equipped with an entry port for a gasoline fill pipe and a separate exit port for a vapor connection.

*Gasoline* means any petroleum distillate or petroleum distillate/alcohol blend having a Reid vapor pressure of 27.6 kilopascals or greater, which is used as a fuel for internal combustion engines.

*Gasoline cargo tank* means a delivery tank truck or railcar which is loading or unloading gasoline, or which has loaded or unloaded gasoline on the immediately previous load.

*Gasoline dispensing facility (GDF)* means any stationary facility which dispenses gasoline into the fuel tank of a motor vehicle, motor vehicle engine, nonroad vehicle, or nonroad engine, including a nonroad vehicle or nonroad engine used solely for competition. These facilities include, but are not limited to, facilities that dispense gasoline into on- and off-road, street, or highway motor vehicles, lawn equipment, boats, test engines, landscaping equipment, generators, pumps, and other gasoline-fueled engines and equipment.

*Monthly throughput* means the total volume of gasoline that is loaded into, or dispensed from, all gasoline storage tanks at each GDF during a month. Monthly throughput is calculated by summing the volume of gasoline loaded into, or dispensed from, all gasoline storage tanks at each GDF during the current day, plus the total volume of gasoline loaded into, or dispensed from, all gasoline storage tanks at each GDF during the previous 364 days, and then dividing that sum by 12.

*Motor vehicle* means any self-propelled vehicle designed for transporting persons or property on a street or highway.

*Nonroad engine* means an internal combustion engine (including the fuel system) that is not used in a motor vehicle or a vehicle used solely for competition, or that is not subject to standards promulgated under section 7411 of this title or section 7521 of this title.

*Nonroad vehicle* means a vehicle that is powered by a nonroad engine, and that is not a motor vehicle or a vehicle used solely for competition.

*Submerged filling* means, for the purposes of this subpart, the filling of a gasoline storage tank through a submerged fill pipe whose discharge is no more than the applicable distance specified in §63.11117(b) from the bottom of the tank. Bottom filling of gasoline storage tanks is included in this definition.

*Vapor balance system* means a combination of pipes and hoses that create a closed system between the vapor spaces of an unloading gasoline cargo tank and a receiving storage tank such that vapors displaced from the storage tank are transferred to the gasoline cargo tank being unloaded.

*Vapor-tight* means equipment that allows no loss of vapors. Compliance with vapor-tight requirements can be determined by checking to ensure that the concentration at a potential leak source is not equal to or greater than 100 percent of the Lower Explosive Limit when measured with a combustible gas detector, calibrated with propane, at a distance of 1 inch from the source.

*Vapor-tight gasoline cargo tank* means a gasoline cargo tank which has demonstrated within the 12 preceding months that it meets the annual certification test requirements in §63.11092(f) of this part.

[73 FR 1945, Jan. 10, 2008, as amended at 76 FR 4183, Jan. 24, 2011]

**Table 1 to Subpart CCCCCC of Part 63—Applicability Criteria and Management Practices for Gasoline Dispensing Facilities With Monthly Throughput of 100,000 Gallons of Gasoline or More<sup>1</sup>**

If you own or operate	Then you must
1. A new, reconstructed, or existing GDF subject to §63.11118	Install and operate a vapor balance system on your gasoline storage tanks that meets the design criteria in paragraphs (a) through (h).
	(a) All vapor connections and lines on the storage tank shall be equipped with closures that seal upon disconnect.
	(b) The vapor line from the gasoline storage tank to the gasoline cargo tank shall be vapor-tight, as defined in §63.11132.
	(c) The vapor balance system shall be designed such that the pressure in the tank truck does not exceed 18 inches water pressure or 5.9 inches water vacuum during product transfer.
	(d) The vapor recovery and product adaptors, and the method of connection with the delivery elbow, shall be designed so as to prevent the over-tightening or loosening of fittings during normal delivery operations.
	(e) If a gauge well separate from the fill tube is used, it shall be provided with a submerged drop tube that extends the same distance from the bottom of the storage tank as specified in §63.11117(b).
	(f) Liquid fill connections for all systems shall be equipped with vapor-tight caps.
	(g) Pressure/vacuum (PV) vent valves shall be installed on the storage tank vent pipes. The pressure specifications for PV vent valves shall be: a positive pressure setting of

	2.5 to 6.0 inches of water and a negative pressure setting of 6.0 to 10.0 inches of water. The total leak rate of all PV vent valves at an affected facility, including connections, shall not exceed 0.17 cubic foot per hour at a pressure of 2.0 inches of water and 0.63 cubic foot per hour at a vacuum of 4 inches of water.
	(h) The vapor balance system shall be capable of meeting the static pressure performance requirement of the following equation:
	$P_f = 2e^{-500.887/v}$
	Where:
	$P_f$ = Minimum allowable final pressure, inches of water.
	$v$ = Total ullage affected by the test, gallons.
	$e$ = Dimensionless constant equal to approximately 2.718.
	2 = The initial pressure, inches water.
2. A new or reconstructed GDF, or any storage tank(s) constructed after November 9, 2006, at an existing affected facility subject to §63.11118	Equip your gasoline storage tanks with a dual-point vapor balance system, as defined in §63.11132, and comply with the requirements of item 1 in this Table.

<sup>1</sup>The management practices specified in this Table are not applicable if you are complying with the requirements in §63.11118(b)(2), except that if you are complying with the requirements in §63.11118(b)(2)(i)(B), you must operate using management practices at least as stringent as those listed in this Table.

[73 FR 1945, Jan. 10, 2008, as amended at 73 FR 35944, June 25, 2008; 76 FR 4184, Jan. 24, 2011]

**Table 2 to Subpart CCCCCC of Part 63—Applicability Criteria and Management Practices for Gasoline Cargo Tanks Unloading at Gasoline Dispensing Facilities With Monthly Throughput of 100,000 Gallons of Gasoline or More**

If you own or operate	Then you must
A gasoline cargo tank	Not unload gasoline into a storage tank at a GDF subject to the control requirements in this subpart unless the following conditions are met:
	(i) All hoses in the vapor balance system are properly connected,
	(ii) The adapters or couplers that attach to the vapor line on the storage tank have closures that seal upon disconnect,
	(iii) All vapor return hoses, couplers, and adapters used in the gasoline

	delivery are vapor-tight,
	(iv) All tank truck vapor return equipment is compatible in size and forms a vapor-tight connection with the vapor balance equipment on the GDF storage tank, and
	(v) All hatches on the tank truck are closed and securely fastened.
	(vi) The filling of storage tanks at GDF shall be limited to unloading from vapor-tight gasoline cargo tanks. Documentation that the cargo tank has met the specifications of EPA Method 27 shall be carried with the cargo tank, as specified in §63.11125(c).

[73 FR 1945, Jan. 10, 2008, as amended at 76 FR 4184, Jan. 24, 2011]

**Table 3 to Subpart CCCCCC of Part 63—Applicability of General Provisions**

<b>Citation</b>	<b>Subject</b>	<b>Brief description</b>	<b>Applies to subpart CCCCCC</b>
§63.1	Applicability	Initial applicability determination; applicability after standard established; permit requirements; extensions, notifications	Yes, specific requirements given in §63.11111.
§63.1(c)(2)	Title V Permit	Requirements for obtaining a title V permit from the applicable permitting authority	Yes, §63.11111(f) of subpart CCCCCC exempts identified area sources from the obligation to obtain title V operating permits.
§63.2	Definitions	Definitions for part 63 standards	Yes, additional definitions in §63.11132.
§63.3	Units and Abbreviations	Units and abbreviations for part 63 standards	Yes.
§63.4	Prohibited Activities and Circumvention	Prohibited activities; Circumvention, severability	Yes.

§63.5	Construction/Reconstruction	Applicability; applications; approvals	Yes, except that these notifications are not required for facilities subject to §63.11116
§63.6(a)	Compliance with Standards/Operation & Maintenance—Applicability	General Provisions apply unless compliance extension; General Provisions apply to area sources that become major	Yes.
§63.6(b)(1)–(4)	Compliance Dates for New and Reconstructed Sources	Standards apply at effective date; 3 years after effective date; upon startup; 10 years after construction or reconstruction commences for CAA section 112(f)	Yes.
§63.6(b)(5)	Notification	Must notify if commenced construction or reconstruction after proposal	Yes.
§63.6(b)(6)	[Reserved]		
§63.6(b)(7)	Compliance Dates for New and Reconstructed Area Sources That Become Major	Area sources that become major must comply with major source standards immediately upon becoming major, regardless of whether required to comply when they were an area source	No.
§63.6(c)(1)–(2)	Compliance Dates for Existing Sources	Comply according to date in this subpart, which must be no later than 3 years after effective date; for CAA section 112(f) standards, comply within 90 days of effective date unless compliance extension	No, §63.11113 specifies the compliance dates.
§63.6(c)(3)–(4)	[Reserved]		

§63.6(c)(5)	Compliance Dates for Existing Area Sources That Become Major	Area sources That become major must comply with major source standards by date indicated in this subpart or by equivalent time period (e.g., 3 years)	No.
§63.6(d)	[Reserved]		
63.6(e)(1)(i)	General duty to minimize emissions	Operate to minimize emissions at all times; information Administrator will use to determine if operation and maintenance requirements were met.	No. <i>See</i> §63.11115 for general duty requirement.
63.6(e)(1)(ii)	Requirement to correct malfunctions ASAP	Owner or operator must correct malfunctions as soon as possible.	No.
§63.6(e)(2)	[Reserved]		
§63.6(e)(3)	Startup, Shutdown, and Malfunction (SSM) Plan	Requirement for SSM plan; content of SSM plan; actions during SSM	No.
§63.6(f)(1)	Compliance Except During SSM	You must comply with emission standards at all times except during SSM	No.
§63.6(f)(2)–(3)	Methods for Determining Compliance	Compliance based on performance test, operation and maintenance plans, records, inspection	Yes.
§63.6(g)(1)–(3)	Alternative Standard	Procedures for getting an alternative standard	Yes.
§63.6(h)(1)	Compliance with Opacity/Visible Emission (VE) Standards	You must comply with opacity/VE standards at all times except during SSM	No.
§63.6(h)(2)(i)	Determining Compliance with Opacity/VE Standards	If standard does not State test method, use EPA Method 9 for opacity in appendix A of part 60 of this chapter and EPA Method 22 for VE in appendix A of part 60 of this chapter	No.

§63.6(h)(2)(ii)	[Reserved]		
§63.6(h)(2)(iii)	Using Previous Tests To Demonstrate Compliance With Opacity/VE Standards	Criteria for when previous opacity/VE testing can be used to show compliance with this subpart	No.
§63.6(h)(3)	[Reserved]		
§63.6(h)(4)	Notification of Opacity/VE Observation Date	Must notify Administrator of anticipated date of observation	No.
§63.6(h)(5)(i), (iii)–(v)	Conducting Opacity/VE Observations	Dates and schedule for conducting opacity/VE observations	No.
§63.6(h)(5)(ii)	Opacity Test Duration and Averaging Times	Must have at least 3 hours of observation with 30 6-minute averages	No.
§63.6(h)(6)	Records of Conditions During Opacity/VE Observations	Must keep records available and allow Administrator to inspect	No.
§63.6(h)(7)(i)	Report Continuous Opacity Monitoring System (COMS) Monitoring Data From Performance Test	Must submit COMS data with other performance test data	No.
§63.6(h)(7)(ii)	Using COMS Instead of EPA Method 9	Can submit COMS data instead of EPA Method 9 results even if rule requires EPA Method 9 in appendix A of part 60 of this chapter, but must notify Administrator before performance test	No.
§63.6(h)(7)(iii)	Averaging Time for COMS During Performance Test	To determine compliance, must reduce COMS data to 6-minute averages	No.
§63.6(h)(7)(iv)	COMS Requirements	Owner/operator must demonstrate that COMS performance evaluations are conducted according to §63.8(e); COMS are properly maintained and operated according to	No.

		§63.8(c) and data quality as §63.8(d)	
§63.6(h)(7)(v)	Determining Compliance with Opacity/VE Standards	COMS is probable but not conclusive evidence of compliance with opacity standard, even if EPA Method 9 observation shows otherwise. Requirements for COMS to be probable evidence-proper maintenance, meeting Performance Specification 1 in appendix B of part 60 of this chapter, and data have not been altered	No.
§63.6(h)(8)	Determining Compliance with Opacity/VE Standards	Administrator will use all COMS, EPA Method 9 (in appendix A of part 60 of this chapter), and EPA Method 22 (in appendix A of part 60 of this chapter) results, as well as information about operation and maintenance to determine compliance	No.
§63.6(h)(9)	Adjusted Opacity Standard	Procedures for Administrator to adjust an opacity standard	No.
§63.6(i)(1)–(14)	Compliance Extension	Procedures and criteria for Administrator to grant compliance extension	Yes.
§63.6(j)	Presidential Compliance Exemption	President may exempt any source from requirement to comply with this subpart	Yes.
§63.7(a)(2)	Performance Test Dates	Dates for conducting initial performance testing; must conduct 180 days after compliance date	Yes.
§63.7(a)(3)	CAA Section 114 Authority	Administrator may require a performance test under CAA section 114 at any	Yes.

		time	
§63.7(b)(1)	Notification of Performance Test	Must notify Administrator 60 days before the test	Yes.
§63.7(b)(2)	Notification of Re-scheduling	If have to reschedule performance test, must notify Administrator of rescheduled date as soon as practicable and without delay	Yes.
§63.7(c)	Quality Assurance (QA)/Test Plan	Requirement to submit site-specific test plan 60 days before the test or on date Administrator agrees with; test plan approval procedures; performance audit requirements; internal and external QA procedures for testing	Yes.
§63.7(d)	Testing Facilities	Requirements for testing facilities	Yes.
63.7(e)(1)	Conditions for Conducting Performance Tests	Performance test must be conducted under representative conditions	No, §63.11120(c) specifies conditions for conducting performance tests.
§63.7(e)(2)	Conditions for Conducting Performance Tests	Must conduct according to this subpart and EPA test methods unless Administrator approves alternative	Yes.
§63.7(e)(3)	Test Run Duration	Must have three test runs of at least 1 hour each; compliance is based on arithmetic mean of three runs; conditions when data from an additional test run can be used	Yes.
§63.7(f)	Alternative Test Method	Procedures by which Administrator can grant approval to use an	Yes.

		intermediate or major change, or alternative to a test method	
§63.7(g)	Performance Test Data Analysis	Must include raw data in performance test report; must submit performance test data 60 days after end of test with the Notification of Compliance Status; keep data for 5 years	Yes.
§63.7(h)	Waiver of Tests	Procedures for Administrator to waive performance test	Yes.
§63.8(a)(1)	Applicability of Monitoring Requirements	Subject to all monitoring requirements in standard	Yes.
§63.8(a)(2)	Performance Specifications	Performance Specifications in appendix B of 40 CFR part 60 apply	Yes.
§63.8(a)(3)	[Reserved]		
§63.8(a)(4)	Monitoring of Flares	Monitoring requirements for flares in §63.11 apply	Yes.
§63.8(b)(1)	Monitoring	Must conduct monitoring according to standard unless Administrator approves alternative	Yes.
§63.8(b)(2)–(3)	Multiple Effluents and Multiple Monitoring Systems	Specific requirements for installing monitoring systems; must install on each affected source or after combined with another affected source before it is released to the atmosphere provided the monitoring is sufficient to demonstrate compliance with the standard; if more than one monitoring system on an emission point, must report all monitoring system results, unless one monitoring system is a backup	No.

§63.8(c)(1)	Monitoring System Operation and Maintenance	Maintain monitoring system in a manner consistent with good air pollution control practices	No.
§63.8(c)(1)(i)–(iii)	Operation and Maintenance of Continuous Monitoring Systems (CMS)	Must maintain and operate each CMS as specified in §63.6(e)(1); must keep parts for routine repairs readily available; must develop a written SSM plan for CMS, as specified in §63.6(e)(3)	No.
§63.8(c)(2)–(8)	CMS Requirements	Must install to get representative emission or parameter measurements; must verify operational status before or at performance test	No.
§63.8(d)	CMS Quality Control	Requirements for CMS quality control, including calibration, etc.; must keep quality control plan on record for 5 years; keep old versions for 5 years after revisions	No.
§63.8(e)	CMS Performance Evaluation	Notification, performance evaluation test plan, reports	No.
§63.8(f)(1)–(5)	Alternative Monitoring Method	Procedures for Administrator to approve alternative monitoring	No.
§63.8(f)(6)	Alternative to Relative Accuracy Test	Procedures for Administrator to approve alternative relative accuracy tests for continuous emissions monitoring system (CEMS)	No.
§63.8(g)	Data Reduction	COMS 6-minute averages calculated over at least 36 evenly spaced data points; CEMS 1 hour averages computed over at least 4 equally spaced data points;	No.

		data that cannot be used in average	
§63.9(a)	Notification Requirements	Applicability and State delegation	Yes.
§63.9(b)(1)–(2), (4)–(5)	Initial Notifications	Submit notification within 120 days after effective date; notification of intent to construct/reconstruct, notification of commencement of construction/reconstruction, notification of startup; contents of each	Yes.
§63.9(c)	Request for Compliance Extension	Can request if cannot comply by date or if installed best available control technology or lowest achievable emission rate	Yes.
§63.9(d)	Notification of Special Compliance Requirements for New Sources	For sources that commence construction between proposal and promulgation and want to comply 3 years after effective date	Yes.
§63.9(e)	Notification of Performance Test	Notify Administrator 60 days prior	Yes.
§63.9(f)	Notification of VE/Opacity Test	Notify Administrator 30 days prior	No.
§63.9(g)	Additional Notifications when Using CMS	Notification of performance evaluation; notification about use of COMS data; notification that exceeded criterion for relative accuracy alternative	Yes, however, there are no opacity standards.
§63.9(h)(1)–(6)	Notification of Compliance Status	Contents due 60 days after end of performance test or other compliance demonstration, except for opacity/VE, which are due 30 days after; when to submit to Federal vs. State authority	Yes, however, there are no opacity standards.

§63.9(i)	Adjustment of Submittal Deadlines	Procedures for Administrator to approve change when notifications must be submitted	Yes.
§63.9(j)	Change in Previous Information	Must submit within 15 days after the change	Yes.
§63.10(a)	Recordkeeping/Reporting	Applies to all, unless compliance extension; when to submit to Federal vs. State authority; procedures for owners of more than one source	Yes.
§63.10(b)(1)	Recordkeeping/Reporting	General requirements; keep all records readily available; keep for 5 years	Yes.
§63.10(b)(2)(i)	Records related to SSM	Recordkeeping of occurrence and duration of startups and shutdowns	No.
§63.10(b)(2)(ii)	Records related to SSM	Recordkeeping of malfunctions	No. <i>See</i> §63.11125(d) for recordkeeping of (1) occurrence and duration and (2) actions taken during malfunction.
§63.10(b)(2)(iii)	Maintenance records	Recordkeeping of maintenance on air pollution control and monitoring equipment	Yes.
§63.10(b)(2)(iv)	Records Related to SSM	Actions taken to minimize emissions during SSM	No.
§63.10(b)(2)(v)	Records Related to SSM	Actions taken to minimize emissions during SSM	No.
§63.10(b)(2)(vi)–(xi)	CMS Records	Malfunctions, inoperative, out-of-control periods	No.
§63.10(b)(2)(xii)	Records	Records when under waiver	Yes.

§63.10(b)(2)(xiii)	Records	Records when using alternative to relative accuracy test	Yes.
§63.10(b)(2)(xiv)	Records	All documentation supporting Initial Notification and Notification of Compliance Status	Yes.
§63.10(b)(3)	Records	Applicability determinations	Yes.
§63.10(c)	Records	Additional records for CMS	No.
§63.10(d)(1)	General Reporting Requirements	Requirement to report	Yes.
§63.10(d)(2)	Report of Performance Test Results	When to submit to Federal or State authority	Yes.
§63.10(d)(3)	Reporting Opacity or VE Observations	What to report and when	No.
§63.10(d)(4)	Progress Reports	Must submit progress reports on schedule if under compliance extension	Yes.
§63.10(d)(5)	SSM Reports	Contents and submission	No. <i>See</i> §63.11126(b) for malfunction reporting requirements.
§63.10(e)(1)–(2)	Additional CMS Reports	Must report results for each CEMS on a unit; written copy of CMS performance evaluation; two-three copies of COMS performance evaluation	No.
§63.10(e)(3)(i)–(iii)	Reports	Schedule for reporting excess emissions	No.
§63.10(e)(3)(iv)–(v)	Excess Emissions Reports	Requirement to revert to quarterly submission if there is an excess emissions and parameter monitor exceedances (now defined as deviations); provision to	No.

		request semiannual reporting after compliance for 1 year; submit report by 30th day following end of quarter or calendar half; if there has not been an exceedance or excess emissions (now defined as deviations), report contents in a statement that there have been no deviations; must submit report containing all of the information in §§63.8(c)(7)–(8) and 63.10(c)(5)–(13)	
§63.10(e)(3)(iv)–(v)	Excess Emissions Reports	Requirement to revert to quarterly submission if there is an excess emissions and parameter monitor exceedances (now defined as deviations); provision to request semiannual reporting after compliance for 1 year; submit report by 30th day following end of quarter or calendar half; if there has not been an exceedance or excess emissions (now defined as deviations), report contents in a statement that there have been no deviations; must submit report containing all of the information in §§63.8(c)(7)–(8) and 63.10(c)(5)–(13)	No, §63.11130(K) specifies excess emission events for this subpart.
§63.10(e)(3)(vi)–(viii)	Excess Emissions Report and Summary Report	Requirements for reporting excess emissions for CMS; requires all of the information in §§63.10(c)(5)–(13) and 63.8(c)(7)–(8)	No.

§63.10(e)(4)	Reporting COMS Data	Must submit COMS data with performance test data	No.
§63.10(f)	Waiver for Recordkeeping/Reporting	Procedures for Administrator to waive	Yes.
§63.11(b)	Flares	Requirements for flares	No.
§63.12	Delegation	State authority to enforce standards	Yes.
§63.13	Addresses	Addresses where reports, notifications, and requests are sent	Yes.
§63.14	Incorporations by Reference	Test methods incorporated by reference	Yes.
§63.15	Availability of Information	Public and confidential information	Yes.

[73 FR 1945, Jan. 10, 2008, as amended at 76 FR 4184, Jan. 24, 2011]

**Attachment C**

**NESHAP 40 CFR Part 63, Subpart ZZZZ**

**Permit Renewal No.: 089-33178-00204**

## **PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES (CONTINUED)**

### **Subpart ZZZZ—National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines**

**SOURCE: 69 FR 33506, June 15, 2004, unless otherwise noted. What This Subpart Covers**

#### **§ 63.6580 What is the purpose of subpart ZZZZ?**

Subpart ZZZZ establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations.

[73 FR 3603, Jan. 18, 2008]

#### **§ 63.6585 Am I subject to this subpart?**

You are subject to this subpart if you own or operate a stationary RICE at a major or area source of HAP emissions, except if the stationary RICE is being tested at a stationary RICE test cell/stand.

(a) A stationary RICE is any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.

(b) A major source of HAP emissions is a plant site that emits or has the potential to emit any single HAP at a rate of 10 tons (9.07 megagrams) or more per year or any combination of HAP at a rate of 25 tons (22.68 megagrams) or more per year, except that for oil and gas production facilities, a major source of HAP emissions is determined for each surface site.

(c) An area source of HAP emissions is a source that is not a major source.

(d) If you are an owner or operator of an area source subject to this subpart, your status as an entity subject to a standard or other requirements under this subpart does not subject you to the obligation to obtain a permit under 40 CFR part 70 or 71, provided you are not required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart as applicable.

(e) If you are an owner or operator of a stationary RICE used for national security purposes, you may be eligible to request an exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C.

(f) The emergency stationary RICE listed in paragraphs (f)(1) through (3) of this section are not subject to this subpart. The stationary RICE must meet the definition of an emergency stationary RICE in § 63.6675, which includes operating according to the provisions specified in § 63.6640(f).

(1) Existing residential emergency stationary RICE located at an area source of HAP emissions that do not operate or are not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in § 63.6640(f)(2)(ii) and (iii) and that do not operate for the purpose specified in § 63.6640(f)(4)(ii).

(2) Existing commercial emergency stationary RICE located at an area source of HAP emissions that do not operate or are not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in § 63.6640(f)(2)(ii) and (iii) and that do not operate for the purpose specified in § 63.6640(f)(4)(ii).

(3) Existing institutional emergency stationary RICE located at an area source of HAP emissions that do not operate or are not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in § 63.6640(f)(2)(ii) and (iii) and that do not operate for the purpose specified in § 63.6640(f)(4)(ii).

[69 FR 33506, June 15, 2004, as amended at 73 FR 3603, Jan. 18, 2008; 78 FR 6700, Jan. 30, 2013]

### **§ 63.6590 What parts of my plant does this subpart cover?**

This subpart applies to each affected source.

(a) *Affected source.* An affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.

#### *(1) Existing stationary RICE.*

(i) For stationary RICE with a site rating of more than 500 brake horsepower (HP) located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before December 19, 2002.

(ii) For stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.

(iii) For stationary RICE located at an area source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.

(iv) A change in ownership of an existing stationary RICE does not make that stationary RICE a new or reconstructed stationary RICE.

(2) *New stationary RICE.* (i) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is new if you commenced construction of the stationary RICE on or after December 19, 2002.

(ii) A stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.

(iii) A stationary RICE located at an area source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.

(3) *Reconstructed stationary RICE.* (i) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is reconstructed if you meet the definition of reconstruction in § 63.2 and reconstruction is commenced on or after December 19, 2002.

(ii) A stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions is reconstructed if you meet the definition of reconstruction in § 63.2 and reconstruction is commenced on or after June 12, 2006.

(iii) A stationary RICE located at an area source of HAP emissions is reconstructed if you meet the definition of reconstruction in § 63.2 and reconstruction is commenced on or after June 12, 2006.

(b) *Stationary RICE subject to limited requirements.* (1) An affected source which meets either of the criteria in paragraphs (b)(1)(i) through (ii) of this section does not have to meet the requirements of this subpart and of subpart A of this part except for the initial notification requirements of § 63.6645(f).

(i) The stationary RICE is a new or reconstructed emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that does not operate or is not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in § 63.6640(f)(2)(ii) and (iii).

(ii) The stationary RICE is a new or reconstructed limited use stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions.

(2) A new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis must meet the initial notification requirements of § 63.6645(f) and the requirements of §§ 63.6625(c), 63.6650(g), and 63.6655(c). These stationary RICE do not have to meet the emission limitations and operating limitations of this subpart.

(3) The following stationary RICE do not have to meet the requirements of this subpart and of subpart A of this part, including initial notification requirements:

(i) Existing spark ignition 2 stroke lean burn (2SLB) stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;

(ii) Existing spark ignition 4 stroke lean burn (4SLB) stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;

(iii) Existing emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that does not operate or is not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in § 63.6640(f)(2)(ii) and (iii).

(iv) Existing limited use stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;

(v) Existing stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis;

(c) *Stationary RICE subject to Regulations under 40 CFR Part 60.* An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part.

(1) A new or reconstructed stationary RICE located at an area source;

(2) A new or reconstructed 2SLB stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;

(3) A new or reconstructed 4SLB stationary RICE with a site rating of less than 250 brake HP located at a major source of HAP emissions;

(4) A new or reconstructed spark ignition 4 stroke rich burn (4SRB) stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;

(5) A new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis;

(6) A new or reconstructed emergency or limited use stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;

(7) A new or reconstructed compression ignition (CI) stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3604, Jan. 18, 2008; 75 FR 9674, Mar. 3, 2010; 75 FR 37733, June 30, 2010; 75 FR 51588, Aug. 20, 2010; 78 FR 6700, Jan. 30, 2013]

#### **§ 63.6595 When do I have to comply with this subpart?**

(a) *Affected sources.* (1) If you have an existing stationary RICE, excluding existing non-emergency CI stationary RICE, with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the applicable emission limitations, operating limitations and other requirements no later than June 15, 2007. If you have an existing non-emergency CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, an existing stationary CI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than May 3, 2013. If you have an existing stationary SI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary SI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than October 19, 2013.

(2) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions before August 16, 2004, you must comply with the applicable emission limitations and operating limitations in this subpart no later than August 16, 2004.

(3) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions after August 16, 2004, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.

(4) If you start up your new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions before January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart no later than January 18, 2008.

(5) If you start up your new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions after January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.

(6) If you start up your new or reconstructed stationary RICE located at an area source of HAP emissions before January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart no later than January 18, 2008.

(7) If you start up your new or reconstructed stationary RICE located at an area source of HAP emissions after January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.

(b) *Area sources that become major sources.* If you have an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP, the compliance dates in paragraphs (b)(1) and (2) of this section apply to you.

(1) Any stationary RICE for which construction or reconstruction is commenced after the date when your area source becomes a major source of HAP must be in compliance with this subpart upon startup of your affected source.

(2) Any stationary RICE for which construction or reconstruction is commenced before your area source becomes a major source of HAP must be in compliance with the provisions of this subpart that are applicable to RICE located at major sources within 3 years after your area source becomes a major source of HAP.

(c) If you own or operate an affected source, you must meet the applicable notification requirements in § 63.6645 and in 40 CFR part 63, subpart A.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3604, Jan. 18, 2008; 75 FR 9675, Mar. 3, 2010; 75 FR 51589, Aug. 20, 2010; 78 FR 6701, Jan. 30, 2013]

## **Emission and Operating Limitations**

### **§ 63.6600 What emission limitations and operating limitations must I meet if I own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions?**

Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in § 63.6620 and Table 4 to this subpart.

(a) If you own or operate an existing, new, or reconstructed spark ignition 4SRB stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 1a to this subpart and the operating limitations in Table 1b to this subpart which apply to you.

(b) If you own or operate a new or reconstructed 2SLB stationary RICE with a site rating of more than 500 brake HP located at major source of HAP emissions, a new or reconstructed 4SLB stationary RICE with a site rating of more than 500 brake HP located at major source of HAP emissions, or a new or reconstructed CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 2a to this subpart and the operating limitations in Table 2b to this subpart which apply to you.

(c) If you own or operate any of the following stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the emission limitations in Tables 1a, 2a, 2c, and 2d to this subpart or operating limitations in Tables 1b and 2b to this subpart: an existing 2SLB stationary RICE; an existing 4SLB stationary RICE; a stationary RICE that combusts landfill

gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis; an emergency stationary RICE; or a limited use stationary RICE.

(d) If you own or operate an existing non-emergency stationary CI RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 2c to this subpart and the operating limitations in Table 2b to this subpart which apply to you.

[73 FR 3605, Jan. 18, 2008, as amended at 75 FR 9675, Mar. 3, 2010]

**§ 63.6601 What emission limitations must I meet if I own or operate a new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 brake HP and less than or equal to 500 brake HP located at a major source of HAP emissions?**

Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in § 63.6620 and Table 4 to this subpart. If you own or operate a new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at major source of HAP emissions manufactured on or after January 1, 2008, you must comply with the emission limitations in Table 2a to this subpart and the operating limitations in Table 2b to this subpart which apply to you.

[73 FR 3605, Jan. 18, 2008, as amended at 75 FR 9675, Mar. 3, 2010; 75 FR 51589, Aug. 20, 2010]

**§ 63.6602 What emission limitations and other requirements must I meet if I own or operate an existing stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions?**

If you own or operate an existing stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations and other requirements in Table 2c to this subpart which apply to you. Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in § 63.6620 and Table 4 to this subpart.

[78 FR 6701, Jan. 30, 2013]

**§ 63.6603 What emission limitations, operating limitations, and other requirements must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions?**

Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in § 63.6620 and Table 4 to this subpart.

(a) If you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to this subpart and the operating limitations in Table 2b to this subpart that apply to you.

(b) If you own or operate an existing stationary non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP that meets either paragraph (b)(1) or (2) of this section, you do not have to meet the numerical CO emission limitations specified in Table 2d of this subpart. Existing stationary non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP that meet either paragraph (b)(1) or (2) of this section must meet the management practices that are shown for stationary non-emergency CI RICE with a site rating of less than or equal to 300 HP in Table 2d of this subpart.

(1) The area source is located in an area of Alaska that is not accessible by the Federal Aid Highway System (FAHS).

(2) The stationary RICE is located at an area source that meets paragraphs (b)(2)(i), (ii), and (iii) of this section.

(i) The only connection to the FAHS is through the Alaska Marine Highway System (AMHS), or the stationary RICE operation is within an isolated grid in Alaska that is not connected to the statewide electrical grid referred to as the Alaska Railbelt Grid.

(ii) At least 10 percent of the power generated by the stationary RICE on an annual basis is used for residential purposes.

(iii) The generating capacity of the area source is less than 12 megawatts, or the stationary RICE is used exclusively for backup power for renewable energy.

(c) If you own or operate an existing stationary non-emergency CI RICE with a site rating of more than 300 HP located on an offshore vessel that is an area source of HAP and is a nonroad vehicle that is an Outer Continental Shelf (OCS) source as defined in 40 CFR 55.2, you do not have to meet the numerical CO emission limitations specified in Table 2d of this subpart. You must meet all of the following management practices:

(1) Change oil every 1,000 hours of operation or annually, whichever comes first. Sources have the option to utilize an oil analysis program as described in § 63.6625(i) in order to extend the specified oil change requirement.

(2) Inspect and clean air filters every 750 hours of operation or annually, whichever comes first, and replace as necessary.

(3) Inspect fuel filters and belts, if installed, every 750 hours of operation or annually, whichever comes first, and replace as necessary.

(4) Inspect all flexible hoses every 1,000 hours of operation or annually, whichever comes first, and replace as necessary.

(d) If you own or operate an existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions that is certified to the Tier 1 or Tier 2 emission standards in Table 1 of 40 CFR 89.112 and that is subject to an enforceable state or local standard that requires the engine to be replaced no later than June 1, 2018, you may until January 1, 2015, or 12 years after the installation date of the engine (whichever is later), but not later than June 1, 2018, choose to comply with the management practices that are shown for stationary non-emergency CI RICE with a site rating of less than or equal to 300 HP in Table 2d of this subpart instead of the applicable emission limitations in Table 2d, operating limitations in Table 2b, and crankcase ventilation system requirements in § 63.6625(g). You must comply with the emission limitations in Table 2d and operating limitations in Table 2b that apply for non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions by January 1, 2015, or 12 years after the installation date of the engine (whichever is later), but not later than June 1, 2018. You must also comply with the crankcase ventilation system requirements in § 63.6625(g) by January 1, 2015, or 12 years after the installation date of the engine (whichever is later), but not later than June 1, 2018.

(e) If you own or operate an existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions that is certified to the Tier 3 (Tier 2 for engines above 560 kilowatt (kW)) emission standards in Table 1 of 40 CFR 89.112, you may comply with the requirements

under this part by meeting the requirements for Tier 3 engines (Tier 2 for engines above 560 kW) in 40 CFR part 60 subpart IIII instead of the emission limitations and other requirements that would otherwise apply under this part for existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions.

(f) An existing non-emergency SI 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at area sources of HAP must meet the definition of remote stationary RICE in § 63.6675 on the initial compliance date for the engine, October 19, 2013, in order to be considered a remote stationary RICE under this subpart. Owners and operators of existing non-emergency SI 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at area sources of HAP that meet the definition of remote stationary RICE in § 63.6675 of this subpart as of October 19, 2013 must evaluate the status of their stationary RICE every 12 months. Owners and operators must keep records of the initial and annual evaluation of the status of the engine. If the evaluation indicates that the stationary RICE no longer meets the definition of remote stationary RICE in § 63.6675 of this subpart, the owner or operator must comply with all of the requirements for existing non-emergency SI 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at area sources of HAP that are not remote stationary RICE within 1 year of the evaluation.

[75 FR 9675, Mar. 3, 2010, as amended at 75 FR 51589, Aug. 20, 2010; 76 FR 12866, Mar. 9, 2011; 78 FR 6701, Jan. 30, 2013]

#### **§ 63.6604 What fuel requirements must I meet if I own or operate a stationary CI RICE?**

(a) If you own or operate an existing non-emergency, non-black start CI stationary RICE with a site rating of more than 300 brake HP with a displacement of less than 30 liters per cylinder that uses diesel fuel, you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel.

(b) Beginning January 1, 2015, if you own or operate an existing emergency CI stationary RICE with a site rating of more than 100 brake HP and a displacement of less than 30 liters per cylinder that uses diesel fuel and operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in § 63.6640(f)(2)(ii) and (iii) or that operates for the purpose specified in § 63.6640(f)(4)(ii), you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted.

(c) Beginning January 1, 2015, if you own or operate a new emergency CI stationary RICE with a site rating of more than 500 brake HP and a displacement of less than 30 liters per cylinder located at a major source of HAP that uses diesel fuel and operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in § 63.6640(f)(2)(ii) and (iii), you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted.

(d) Existing CI stationary RICE located in Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, at area sources in areas of Alaska that meet either § 63.6603(b)(1) or § 63.6603(b)(2), or are on offshore vessels that meet § 63.6603(c) are exempt from the requirements of this section.

[78 FR 6702, Jan. 30, 2013]

#### **General Compliance Requirements**

##### **§ 63.6605 What are my general requirements for complying with this subpart?**

(a) You must be in compliance with the emission limitations, operating limitations, and other requirements in this subpart that apply to you at all times.

(b) At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

[75 FR 9675, Mar. 3, 2010, as amended at 78 FR 6702, Jan. 30, 2013]

### Testing and Initial Compliance Requirements

#### **§ 63.6610 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions?**

If you own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions you are subject to the requirements of this section.

(a) You must conduct the initial performance test or other initial compliance demonstrations in Table 4 to this subpart that apply to you within 180 days after the compliance date that is specified for your stationary RICE in § 63.6595 and according to the provisions in § 63.7(a)(2).

(b) If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004 and own or operate stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must demonstrate initial compliance with either the proposed emission limitations or the promulgated emission limitations no later than February 10, 2005 or no later than 180 days after startup of the source, whichever is later, according to § 63.7(a)(2)(ix).

(c) If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004 and own or operate stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, and you chose to comply with the proposed emission limitations when demonstrating initial compliance, you must conduct a second performance test to demonstrate compliance with the promulgated emission limitations by December 13, 2007 or after startup of the source, whichever is later, according to § 63.7(a)(2)(ix).

(d) An owner or operator is not required to conduct an initial performance test on units for which a performance test has been previously conducted, but the test must meet all of the conditions described in paragraphs (d)(1) through (5) of this section.

(1) The test must have been conducted using the same methods specified in this subpart, and these methods must have been followed correctly.

(2) The test must not be older than 2 years.

(3) The test must be reviewed and accepted by the Administrator.

(4) Either no process or equipment changes must have been made since the test was performed, or the owner or operator must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes.

(5) The test must be conducted at any load condition within plus or minus 10 percent of 100 percent load.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3605, Jan. 18, 2008]

**§ 63.6611 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate a new or reconstructed 4SLB SI stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions?**

If you own or operate a new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions, you must conduct an initial performance test within 240 days after the compliance date that is specified for your stationary RICE in § 63.6595 and according to the provisions specified in Table 4 to this subpart, as appropriate.

[73 FR 3605, Jan. 18, 2008, as amended at 75 FR 51589, Aug. 20, 2010]

**§ 63.6612 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate an existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing stationary RICE located at an area source of HAP emissions?**

If you own or operate an existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing stationary RICE located at an area source of HAP emissions you are subject to the requirements of this section.

(a) You must conduct any initial performance test or other initial compliance demonstration according to Tables 4 and 5 to this subpart that apply to you within 180 days after the compliance date that is specified for your stationary RICE in § 63.6595 and according to the provisions in § 63.7(a)(2).

(b) An owner or operator is not required to conduct an initial performance test on a unit for which a performance test has been previously conducted, but the test must meet all of the conditions described in paragraphs (b)(1) through (4) of this section.

(1) The test must have been conducted using the same methods specified in this subpart, and these methods must have been followed correctly.

(2) The test must not be older than 2 years.

(3) The test must be reviewed and accepted by the Administrator.

(4) Either no process or equipment changes must have been made since the test was performed, or the owner or operator must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes.

[75 FR 9676, Mar. 3, 2010, as amended at 75 FR 51589, Aug. 20, 2010]

**§ 63.6615 When must I conduct subsequent performance tests?**

If you must comply with the emission limitations and operating limitations, you must conduct subsequent performance tests as specified in Table 3 of this subpart.

**§ 63.6620 What performance tests and other procedures must I use?**

(a) You must conduct each performance test in Tables 3 and 4 of this subpart that applies to you.

(b) Each performance test must be conducted according to the requirements that this subpart specifies in Table 4 to this subpart. If you own or operate a non-operational stationary RICE that is subject to performance testing, you do not need to start up the engine solely to conduct the performance test. Owners and operators of a non-operational engine can conduct the performance test when the engine is started up again. The test must be conducted at any load condition within plus or minus 10 percent of 100 percent load for the stationary RICE listed in paragraphs (b)(1) through (4) of this section.

(1) Non-emergency 4SRB stationary RICE with a site rating of greater than 500 brake HP located at a major source of HAP emissions.

(2) New non-emergency 4SLB stationary RICE with a site rating of greater than or equal to 250 brake HP located at a major source of HAP emissions.

(3) New non-emergency 2SLB stationary RICE with a site rating of greater than 500 brake HP located at a major source of HAP emissions.

(4) New non-emergency CI stationary RICE with a site rating of greater than 500 brake HP located at a major source of HAP emissions.

(c) [Reserved]

(d) You must conduct three separate test runs for each performance test required in this section, as specified in § 63.7(e)(3). Each test run must last at least 1 hour, unless otherwise specified in this subpart.

(e)(1) You must use Equation 1 of this section to determine compliance with the percent reduction requirement:

$$\frac{C_i - C_o}{C_i} \times 100 = R \quad (\text{Eq. 1})$$

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Where:

$C_i$  = concentration of carbon monoxide (CO), total hydrocarbons (THC), or formaldehyde at the control device inlet,

$C_o$  = concentration of CO, THC, or formaldehyde at the control device outlet, and

R = percent reduction of CO, THC, or formaldehyde emissions.

(2) You must normalize the CO, THC, or formaldehyde concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen, or an equivalent percent carbon dioxide (CO<sub>2</sub>). If pollutant concentrations are to be corrected to 15 percent oxygen and CO<sub>2</sub> concentration is measured in

lieu of oxygen concentration measurement, a CO<sub>2</sub> correction factor is needed. Calculate the CO<sub>2</sub> correction factor as described in paragraphs (e)(2)(i) through (iii) of this section.

(i) Calculate the fuel-specific F<sub>o</sub> value for the fuel burned during the test using values obtained from Method 19, Section 5.2, and the following equation:

$$F_o = \frac{0.209 F_d}{F_c} \quad (\text{Eq. 2})$$

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Where:

F<sub>o</sub> = Fuel factor based on the ratio of oxygen volume to the ultimate CO<sub>2</sub> volume produced by the fuel at zero percent excess air.

0.209 = Fraction of air that is oxygen, percent/100.

F<sub>d</sub> = Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm<sup>3</sup> / J (dscf/10<sup>6</sup> Btu).

F<sub>c</sub> = Ratio of the volume of CO<sub>2</sub> produced to the gross calorific value of the fuel from Method 19, dsm<sup>3</sup> / J (dscf/10<sup>6</sup> Btu)

(ii) Calculate the CO<sub>2</sub> correction factor for correcting measurement data to 15 percent O<sub>2</sub> , as follows:

$$X_{CO_2} = \frac{5.9}{F_o} \quad (\text{Eq. 3})$$

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Where:

X<sub>CO<sub>2</sub></sub> = CO<sub>2</sub> correction factor, percent.

5.9 = 20.9 percent O<sub>2</sub> —15 percent O<sub>2</sub> , the defined O<sub>2</sub> correction value, percent.

(iii) Calculate the CO, THC, and formaldehyde gas concentrations adjusted to 15 percent O<sub>2</sub> using CO<sub>2</sub> as follows:

$$C_{adj} = C_d \frac{X_{CO_2}}{\%CO_2} \quad (\text{Eq. 4})$$

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Where:

C<sub>adj</sub> = Calculated concentration of CO, THC, or formaldehyde adjusted to 15 percent O<sub>2</sub>.

C<sub>d</sub> = Measured concentration of CO, THC, or formaldehyde, uncorrected.

X<sub>CO<sub>2</sub></sub> = CO<sub>2</sub> correction factor, percent.

%CO<sub>2</sub> = Measured CO<sub>2</sub> concentration measured, dry basis, percent.

(f) If you comply with the emission limitation to reduce CO and you are not using an oxidation catalyst, if you comply with the emission limitation to reduce formaldehyde and you are not using NSCR, or if you comply with the emission limitation to limit the concentration of formaldehyde in the stationary RICE exhaust and you are not using an oxidation catalyst or NSCR, you must petition the Administrator for operating limitations to be established during the initial performance test and continuously monitored thereafter; or for approval of no operating limitations. You must not conduct the initial performance test until after the petition has been approved by the Administrator.

(g) If you petition the Administrator for approval of operating limitations, your petition must include the information described in paragraphs (g)(1) through (5) of this section.

(1) Identification of the specific parameters you propose to use as operating limitations;

(2) A discussion of the relationship between these parameters and HAP emissions, identifying how HAP emissions change with changes in these parameters, and how limitations on these parameters will serve to limit HAP emissions;

(3) A discussion of how you will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations;

(4) A discussion identifying the methods you will use to measure and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and

(5) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.

(h) If you petition the Administrator for approval of no operating limitations, your petition must include the information described in paragraphs (h)(1) through (7) of this section.

(1) Identification of the parameters associated with operation of the stationary RICE and any emission control device which could change intentionally ( e.g., operator adjustment, automatic controller adjustment, etc.) or unintentionally ( e.g., wear and tear, error, etc.) on a routine basis or over time;

(2) A discussion of the relationship, if any, between changes in the parameters and changes in HAP emissions;

(3) For the parameters which could change in such a way as to increase HAP emissions, a discussion of whether establishing limitations on the parameters would serve to limit HAP emissions;

(4) For the parameters which could change in such a way as to increase HAP emissions, a discussion of how you could establish upper and/or lower values for the parameters which would establish limits on the parameters in operating limitations;

(5) For the parameters, a discussion identifying the methods you could use to measure them and the instruments you could use to monitor them, as well as the relative accuracy and precision of the methods and instruments;

(6) For the parameters, a discussion identifying the frequency and methods for recalibrating the instruments you could use to monitor them; and

(7) A discussion of why, from your point of view, it is infeasible or unreasonable to adopt the parameters as operating limitations.

(i) The engine percent load during a performance test must be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. A written report of the average percent load determination must be included in the notification of compliance status. The following information must be included in the written report: the engine model number, the engine manufacturer, the year of purchase, the manufacturer's site-rated brake horsepower, the ambient temperature, pressure, and humidity during the performance test, and all assumptions that were made to estimate or calculate percent load during the performance test must be clearly explained. If measurement devices such as flow meters, kilowatt meters, beta analyzers, stain gauges, etc. are used, the model number of the measurement device, and an estimate of its accurate in percentage of true value must be provided.

[69 FR 33506, June 15, 2004, as amended at 75 FR 9676, Mar. 3, 2010; 78 FR 6702, Jan. 30, 2013]

### **§ 63.6625 What are my monitoring, installation, collection, operation, and maintenance requirements?**

(a) If you elect to install a CEMS as specified in Table 5 of this subpart, you must install, operate, and maintain a CEMS to monitor CO and either O<sub>2</sub> or CO<sub>2</sub> according to the requirements in paragraphs (a)(1) through (4) of this section. If you are meeting a requirement to reduce CO emissions, the CEMS must be installed at both the inlet and outlet of the control device. If you are meeting a requirement to limit the concentration of CO, the CEMS must be installed at the outlet of the control device.

(1) Each CEMS must be installed, operated, and maintained according to the applicable performance specifications of 40 CFR part 60, appendix B.

(2) You must conduct an initial performance evaluation and an annual relative accuracy test audit (RATA) of each CEMS according to the requirements in § 63.8 and according to the applicable performance specifications of 40 CFR part 60, appendix B as well as daily and periodic data quality checks in accordance with 40 CFR part 60, appendix F, procedure 1.

(3) As specified in § 63.8(c)(4)(ii), each CEMS must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period. You must have at least two data points, with each representing a different 15-minute period, to have a valid hour of data.

(4) The CEMS data must be reduced as specified in § 63.8(g)(2) and recorded in parts per million or parts per billion (as appropriate for the applicable limitation) at 15 percent oxygen or the equivalent CO<sub>2</sub> concentration.

(b) If you are required to install a continuous parameter monitoring system (CPMS) as specified in Table 5 of this subpart, you must install, operate, and maintain each CPMS according to the requirements in paragraphs (b)(1) through (6) of this section. For an affected source that is complying with the emission limitations and operating limitations on March 9, 2011, the requirements in paragraph (b) of this section are applicable September 6, 2011.

(1) You must prepare a site-specific monitoring plan that addresses the monitoring system design, data collection, and the quality assurance and quality control elements outlined in paragraphs (b)(1)(i) through (v) of this section and in § 63.8(d). As specified in § 63.8(f)(4), you may request approval of monitoring system quality assurance and quality control procedures alternative to those specified in paragraphs (b)(1) through (5) of this section in your site-specific monitoring plan.

(i) The performance criteria and design specifications for the monitoring system equipment, including the sample interface, detector signal analyzer, and data acquisition and calculations;

(ii) Sampling interface ( e.g., thermocouple) location such that the monitoring system will provide representative measurements;

(iii) Equipment performance evaluations, system accuracy audits, or other audit procedures;

(iv) Ongoing operation and maintenance procedures in accordance with provisions in § 63.8(c)(1)(ii) and (c)(3); and

(v) Ongoing reporting and recordkeeping procedures in accordance with provisions in § 63.10(c), (e)(1), and (e)(2)(i).

(2) You must install, operate, and maintain each CPMS in continuous operation according to the procedures in your site-specific monitoring plan.

(3) The CPMS must collect data at least once every 15 minutes (see also § 63.6635).

(4) For a CPMS for measuring temperature range, the temperature sensor must have a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit) or 1 percent of the measurement range, whichever is larger.

(5) You must conduct the CPMS equipment performance evaluation, system accuracy audits, or other audit procedures specified in your site-specific monitoring plan at least annually.

(6) You must conduct a performance evaluation of each CPMS in accordance with your site-specific monitoring plan.

(c) If you are operating a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must monitor and record your fuel usage daily with separate fuel meters to measure the volumetric flow rate of each fuel. In addition, you must operate your stationary RICE in a manner which reasonably minimizes HAP emissions.

(d) If you are operating a new or reconstructed emergency 4SLB stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions, you must install a non-resettable hour meter prior to the startup of the engine.

(e) If you own or operate any of the following stationary RICE, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions:

(1) An existing stationary RICE with a site rating of less than 100 HP located at a major source of HAP emissions;

(2) An existing emergency or black start stationary RICE with a site rating of less than or equal to 500 HP located at a major source of HAP emissions;

(3) An existing emergency or black start stationary RICE located at an area source of HAP emissions;

(4) An existing non-emergency, non-black start stationary CI RICE with a site rating less than or equal to 300 HP located at an area source of HAP emissions;

(5) An existing non-emergency, non-black start 2SLB stationary RICE located at an area source of HAP emissions;

(6) An existing non-emergency, non-black start stationary RICE located at an area source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis.

(7) An existing non-emergency, non-black start 4SLB stationary RICE with a site rating less than or equal to 500 HP located at an area source of HAP emissions;

(8) An existing non-emergency, non-black start 4SRB stationary RICE with a site rating less than or equal to 500 HP located at an area source of HAP emissions;

(9) An existing, non-emergency, non-black start 4SLB stationary RICE with a site rating greater than 500 HP located at an area source of HAP emissions that is operated 24 hours or less per calendar year; and

(10) An existing, non-emergency, non-black start 4SRB stationary RICE with a site rating greater than 500 HP located at an area source of HAP emissions that is operated 24 hours or less per calendar year.

(f) If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.

(g) If you own or operate an existing non-emergency, non-black start CI engine greater than or equal to 300 HP that is not equipped with a closed crankcase ventilation system, you must comply with either paragraph (g)(1) or paragraph (2) of this section. Owners and operators must follow the manufacturer's specified maintenance requirements for operating and maintaining the open or closed crankcase ventilation systems and replacing the crankcase filters, or can request the Administrator to approve different maintenance requirements that are as protective as manufacturer requirements. Existing CI engines located at area sources in areas of Alaska that meet either § 63.6603(b)(1) or § 63.6603(b)(2) do not have to meet the requirements of this paragraph (g). Existing CI engines located on offshore vessels that meet § 63.6603(c) do not have to meet the requirements of this paragraph (g).

(1) Install a closed crankcase ventilation system that prevents crankcase emissions from being emitted to the atmosphere, or

(2) Install an open crankcase filtration emission control system that reduces emissions from the crankcase by filtering the exhaust stream to remove oil mist, particulates and metals.

(h) If you operate a new, reconstructed, or existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to this subpart apply.

(i) If you own or operate a stationary CI engine that is subject to the work, operation or management practices in items 1 or 2 of Table 2c to this subpart or in items 1 or 4 of Table 2d to this subpart, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the

following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

(j) If you own or operate a stationary SI engine that is subject to the work, operation or management practices in items 6, 7, or 8 of Table 2c to this subpart or in items 5, 6, 7, 9, or 11 of Table 2d to this subpart, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3606, Jan. 18, 2008; 75 FR 9676, Mar. 3, 2010; 75 FR 51589, Aug. 20, 2010; 76 FR 12866, Mar. 9, 2011; 78 FR 6703, Jan. 30, 2013]

**§ 63.6630 How do I demonstrate initial compliance with the emission limitations, operating limitations, and other requirements?**

(a) You must demonstrate initial compliance with each emission limitation, operating limitation, and other requirement that applies to you according to Table 5 of this subpart.

(b) During the initial performance test, you must establish each operating limitation in Tables 1b and 2b of this subpart that applies to you.

(c) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in § 63.6645.

(d) Non-emergency 4SRB stationary RICE complying with the requirement to reduce formaldehyde emissions by 76 percent or more can demonstrate initial compliance with the formaldehyde emission limit by testing for THC instead of formaldehyde. The testing must be conducted according to the requirements in Table 4 of this subpart. The average reduction of emissions of THC determined from the performance test must be equal to or greater than 30 percent.

(e) The initial compliance demonstration required for existing non-emergency 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at an area source of HAP that are not remote

stationary RICE and that are operated more than 24 hours per calendar year must be conducted according to the following requirements:

- (1) The compliance demonstration must consist of at least three test runs.
- (2) Each test run must be of at least 15 minute duration, except that each test conducted using the method in appendix A to this subpart must consist of at least one measurement cycle and include at least 2 minutes of test data phase measurement.
- (3) If you are demonstrating compliance with the CO concentration or CO percent reduction requirement, you must measure CO emissions using one of the CO measurement methods specified in Table 4 of this subpart, or using appendix A to this subpart.
- (4) If you are demonstrating compliance with the THC percent reduction requirement, you must measure THC emissions using Method 25A, reported as propane, of 40 CFR part 60, appendix A.
- (5) You must measure O<sub>2</sub> using one of the O<sub>2</sub> measurement methods specified in Table 4 of this subpart. Measurements to determine O<sub>2</sub> concentration must be made at the same time as the measurements for CO or THC concentration.
- (6) If you are demonstrating compliance with the CO or THC percent reduction requirement, you must measure CO or THC emissions and O<sub>2</sub> emissions simultaneously at the inlet and outlet of the control device.

[69 FR 33506, June 15, 2004, as amended at 78 FR 6704, Jan. 30, 2013]

### **Continuous Compliance Requirements**

#### **§ 63.6635 How do I monitor and collect data to demonstrate continuous compliance?**

- (a) If you must comply with emission and operating limitations, you must monitor and collect data according to this section.
- (b) Except for monitor malfunctions, associated repairs, required performance evaluations, and required quality assurance or control activities, you must monitor continuously at all times that the stationary RICE is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.
- (c) You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. You must, however, use all the valid data collected during all other periods.

[69 FR 33506, June 15, 2004, as amended at 76 FR 12867, Mar. 9, 2011]

#### **§ 63.6640 How do I demonstrate continuous compliance with the emission limitations, operating limitations, and other requirements?**

- (a) You must demonstrate continuous compliance with each emission limitation, operating limitation, and other requirements in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you according to methods specified in Table 6 to this subpart.

(b) You must report each instance in which you did not meet each emission limitation or operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you. These instances are deviations from the emission and operating limitations in this subpart. These deviations must be reported according to the requirements in § 63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE.

(c) The annual compliance demonstration required for existing non-emergency 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year must be conducted according to the following requirements:

(1) The compliance demonstration must consist of at least one test run.

(2) Each test run must be of at least 15 minute duration, except that each test conducted using the method in appendix A to this subpart must consist of at least one measurement cycle and include at least 2 minutes of test data phase measurement.

(3) If you are demonstrating compliance with the CO concentration or CO percent reduction requirement, you must measure CO emissions using one of the CO measurement methods specified in Table 4 of this subpart, or using appendix A to this subpart.

(4) If you are demonstrating compliance with the THC percent reduction requirement, you must measure THC emissions using Method 25A, reported as propane, of 40 CFR part 60, appendix A.

(5) You must measure O<sub>2</sub> using one of the O<sub>2</sub> measurement methods specified in Table 4 of this subpart. Measurements to determine O<sub>2</sub> concentration must be made at the same time as the measurements for CO or THC concentration.

(6) If you are demonstrating compliance with the CO or THC percent reduction requirement, you must measure CO or THC emissions and O<sub>2</sub> emissions simultaneously at the inlet and outlet of the control device.

(7) If the results of the annual compliance demonstration show that the emissions exceed the levels specified in Table 6 of this subpart, the stationary RICE must be shut down as soon as safely possible, and appropriate corrective action must be taken (e.g., repairs, catalyst cleaning, catalyst replacement). The stationary RICE must be retested within 7 days of being restarted and the emissions must meet the levels specified in Table 6 of this subpart. If the retest shows that the emissions continue to exceed the specified levels, the stationary RICE must again be shut down as soon as safely possible, and the stationary RICE may not operate, except for purposes of startup and testing, until the owner/operator demonstrates through testing that the emissions do not exceed the levels specified in Table 6 of this subpart.

(d) For new, reconstructed, and rebuilt stationary RICE, deviations from the emission or operating limitations that occur during the first 200 hours of operation from engine startup (engine burn-in period) are not violations. Rebuilt stationary RICE means a stationary RICE that has been rebuilt as that term is defined in 40 CFR 94.11(a).

(e) You must also report each instance in which you did not meet the requirements in Table 8 to this subpart that apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new

or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to this subpart: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing emergency stationary RICE, an existing limited use stationary RICE, or an existing stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to this subpart, except for the initial notification requirements: a new or reconstructed stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new or reconstructed emergency stationary RICE, or a new or reconstructed limited use stationary RICE.

(f) If you own or operate an emergency stationary RICE, you must operate the emergency stationary RICE according to the requirements in paragraphs (f)(1) through (4) of this section. In order for the engine to be considered an emergency stationary RICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (4) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (4) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

(1) There is no time limit on the use of emergency stationary RICE in emergency situations.

(2) You may operate your emergency stationary RICE for any combination of the purposes specified in paragraphs (f)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraphs (f)(3) and (4) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).

(i) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

(ii) Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see § 63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

(iii) Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

(3) Emergency stationary RICE located at major sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(4) Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. Except as provided in paragraphs (f)(4)(i) and (ii) of this section, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(i) Prior to May 3, 2014, the 50 hours per year for non-emergency situations can be used for peak shaving or non-emergency demand response to generate income for a facility, or to otherwise supply power as part of a financial arrangement with another entity if the engine is operated as part of a peak shaving (load management program) with the local distribution system operator and the power is provided only to the facility itself or to support the local distribution system.

(ii) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

(A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator.

(B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

(C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

(D) The power is provided only to the facility itself or to support the local transmission and distribution system.

(E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

[69 FR 33506, June 15, 2004, as amended at 71 FR 20467, Apr. 20, 2006; 73 FR 3606, Jan. 18, 2008; 75 FR 9676, Mar. 3, 2010; 75 FR 51591, Aug. 20, 2010; 78 FR 6704, Jan. 30, 2013]

## **Notifications, Reports, and Records**

### **§ 63.6645 What notifications must I submit and when?**

(a) You must submit all of the notifications in §§ 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified if you own or operate any of the following;

(1) An existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions.

(2) An existing stationary RICE located at an area source of HAP emissions.

(3) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions.

(4) A new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 HP located at a major source of HAP emissions.

(5) This requirement does not apply if you own or operate an existing stationary RICE less than 100 HP, an existing stationary emergency RICE, or an existing stationary RICE that is not subject to any numerical emission standards.

(b) As specified in § 63.9(b)(2), if you start up your stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions before the effective date of this subpart, you must submit an Initial Notification not later than December 13, 2004.

(c) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions on or after August 16, 2004, you must submit an Initial Notification not later than 120 days after you become subject to this subpart.

(d) As specified in § 63.9(b)(2), if you start up your stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions before the effective date of this subpart and you are required to submit an initial notification, you must submit an Initial Notification not later than July 16, 2008.

(e) If you start up your new or reconstructed stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions on or after March 18, 2008 and you are required to submit an initial notification, you must submit an Initial Notification not later than 120 days after you become subject to this subpart.

(f) If you are required to submit an Initial Notification but are otherwise not affected by the requirements of this subpart, in accordance with § 63.6590(b), your notification should include the information in § 63.9(b)(2)(i) through (v), and a statement that your stationary RICE has no additional requirements and explain the basis of the exclusion (for example, that it operates exclusively as an emergency stationary RICE if it has a site rating of more than 500 brake HP located at a major source of HAP emissions).

(g) If you are required to conduct a performance test, you must submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required in § 63.7(b)(1).

(h) If you are required to conduct a performance test or other initial compliance demonstration as specified in Tables 4 and 5 to this subpart, you must submit a Notification of Compliance Status according to § 63.9(h)(2)(ii).

(1) For each initial compliance demonstration required in Table 5 to this subpart that does not include a performance test, you must submit the Notification of Compliance Status before the close of business on the 30th day following the completion of the initial compliance demonstration.

(2) For each initial compliance demonstration required in Table 5 to this subpart that includes a performance test conducted according to the requirements in Table 3 to this subpart, you must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to § 63.10(d)(2).

(i) If you own or operate an existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions that is certified to the Tier 1 or Tier 2 emission standards in

Table 1 of 40 CFR 89.112 and subject to an enforceable state or local standard requiring engine replacement and you intend to meet management practices rather than emission limits, as specified in § 63.6603(d), you must submit a notification by March 3, 2013, stating that you intend to use the provision in § 63.6603(d) and identifying the state or local regulation that the engine is subject to.

[73 FR 3606, Jan. 18, 2008, as amended at 75 FR 9677, Mar. 3, 2010; 75 FR 51591, Aug. 20, 2010; 78 FR 6705, Jan. 30, 2013]

**§ 63.6650 What reports must I submit and when?**

(a) You must submit each report in Table 7 of this subpart that applies to you.

(b) Unless the Administrator has approved a different schedule for submission of reports under § 63.10(a), you must submit each report by the date in Table 7 of this subpart and according to the requirements in paragraphs (b)(1) through (b)(9) of this section.

(1) For semiannual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in § 63.6595 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in § 63.6595.

(2) For semiannual Compliance reports, the first Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in § 63.6595.

(3) For semiannual Compliance reports, each subsequent Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(4) For semiannual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(5) For each stationary RICE that is subject to permitting regulations pursuant to 40 CFR part 70 or 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6 (a)(3)(iii)(A), you may submit the first and subsequent Compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (b)(1) through (b)(4) of this section.

(6) For annual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in § 63.6595 and ending on December 31.

(7) For annual Compliance reports, the first Compliance report must be postmarked or delivered no later than January 31 following the end of the first calendar year after the compliance date that is specified for your affected source in § 63.6595.

(8) For annual Compliance reports, each subsequent Compliance report must cover the annual reporting period from January 1 through December 31.

(9) For annual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than January 31.

(c) The Compliance report must contain the information in paragraphs (c)(1) through (6) of this section.

(1) Company name and address.

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

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

(4) If you had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with § 63.6605(b), including actions taken to correct a malfunction.

(5) If there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period.

(6) If there were no periods during which the continuous monitoring system (CMS), including CEMS and CPMS, was out-of-control, as specified in § 63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period.

(d) For each deviation from an emission or operating limitation that occurs for a stationary RICE where you are not using a CMS to comply with the emission or operating limitations in this subpart, the Compliance report must contain the information in paragraphs (c)(1) through (4) of this section and the information in paragraphs (d)(1) and (2) of this section.

(1) The total operating time of the stationary RICE at which the deviation occurred during the reporting period.

(2) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

(e) For each deviation from an emission or operating limitation occurring for a stationary RICE where you are using a CMS to comply with the emission and operating limitations in this subpart, you must include information in paragraphs (c)(1) through (4) and (e)(1) through (12) of this section.

(1) The date and time that each malfunction started and stopped.

(2) The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks.

(3) The date, time, and duration that each CMS was out-of-control, including the information in § 63.8(c)(8).

(4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period.

(5) A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period.

(6) A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.

(7) A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total operating time of the stationary RICE at which the CMS downtime occurred during that reporting period.

(8) An identification of each parameter and pollutant (CO or formaldehyde) that was monitored at the stationary RICE.

(9) A brief description of the stationary RICE.

(10) A brief description of the CMS.

(11) The date of the latest CMS certification or audit.

(12) A description of any changes in CMS, processes, or controls since the last reporting period.

(f) Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6 (a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a Compliance report pursuant to Table 7 of this subpart along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the Compliance report includes all required information concerning deviations from any emission or operating limitation in this subpart, submission of the Compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a Compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority.

(g) If you are operating as a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must submit an annual report according to Table 7 of this subpart by the date specified unless the Administrator has approved a different schedule, according to the information described in paragraphs (b)(1) through (b)(5) of this section. You must report the data specified in (g)(1) through (g)(3) of this section.

(1) Fuel flow rate of each fuel and the heating values that were used in your calculations. You must also demonstrate that the percentage of heat input provided by landfill gas or digester gas is equivalent to 10 percent or more of the total fuel consumption on an annual basis.

(2) The operating limits provided in your federally enforceable permit, and any deviations from these limits.

(3) Any problems or errors suspected with the meters.

(h) If you own or operate an emergency stationary RICE with a site rating of more than 100 brake HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in § 63.6640(f)(2)(ii) and (iii) or that operates for the purpose specified in § 63.6640(f)(4)(ii), you must submit an annual report according to the requirements in paragraphs (h)(1) through (3) of this section.

(1) The report must contain the following information:

(i) Company name and address where the engine is located.

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

(iii) Engine site rating and model year.

(iv) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.

(v) Hours operated for the purposes specified in § 63.6640(f)(2)(ii) and (iii), including the date, start time, and end time for engine operation for the purposes specified in § 63.6640(f)(2)(ii) and (iii).

(vi) Number of hours the engine is contractually obligated to be available for the purposes specified in § 63.6640(f)(2)(ii) and (iii).

(vii) Hours spent for operation for the purpose specified in § 63.6640(f)(4)(ii), including the date, start time, and end time for engine operation for the purposes specified in § 63.6640(f)(4)(ii). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.

(viii) If there were no deviations from the fuel requirements in § 63.6604 that apply to the engine (if any), a statement that there were no deviations from the fuel requirements during the reporting period.

(ix) If there were deviations from the fuel requirements in § 63.6604 that apply to the engine (if any), information on the number, duration, and cause of deviations, and the corrective action taken.

(2) The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.

(3) The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) ( [www.epa.gov/cdx](http://www.epa.gov/cdx) ). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in § 63.13.

[69 FR 33506, June 15, 2004, as amended at 75 FR 9677, Mar. 3, 2010; 78 FR 6705, Jan. 30, 2013]

#### **§ 63.6655 What records must I keep?**

(a) If you must comply with the emission and operating limitations, you must keep the records described in paragraphs (a)(1) through (a)(5), (b)(1) through (b)(3) and (c) of this section.

(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in § 63.10(b)(2)(xiv).

(2) Records of the occurrence and duration of each malfunction of operation ( *i.e.*, process equipment) or the air pollution control and monitoring equipment.

(3) Records of performance tests and performance evaluations as required in § 63.10(b)(2)(viii).

(4) Records of all required maintenance performed on the air pollution control and monitoring equipment.

(5) Records of actions taken during periods of malfunction to minimize emissions in accordance with § 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

(b) For each CEMS or CPMS, you must keep the records listed in paragraphs (b)(1) through (3) of this section.

(1) Records described in § 63.10(b)(2)(vi) through (xi).

(2) Previous ( *i.e.*, superseded) versions of the performance evaluation plan as required in § 63.8(d)(3).

(3) Requests for alternatives to the relative accuracy test for CEMS or CPMS as required in § 63.8(f)(6)(i), if applicable.

(c) If you are operating a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must keep the records of your daily fuel usage monitors.

(d) You must keep the records required in Table 6 of this subpart to show continuous compliance with each emission or operating limitation that applies to you.

(e) You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE;

(1) An existing stationary RICE with a site rating of less than 100 brake HP located at a major source of HAP emissions.

(2) An existing stationary emergency RICE.

(3) An existing stationary RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to this subpart.

(f) If you own or operate any of the stationary RICE in paragraphs (f)(1) through (2) of this section, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in § 63.6640(f)(2)(ii) or (iii) or § 63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.

(1) An existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions that does not meet the standards applicable to non-emergency engines.

(2) An existing emergency stationary RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines.

[69 FR 33506, June 15, 2004, as amended at 75 FR 9678, Mar. 3, 2010; 75 FR 51592, Aug. 20, 2010; 78 FR 6706, Jan. 30, 2013]

### **§ 63.6660 In what form and how long must I keep my records?**

(a) Your records must be in a form suitable and readily available for expeditious review according to § 63.10(b)(1).

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

(c) You must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to § 63.10(b)(1).

[69 FR 33506, June 15, 2004, as amended at 75 FR 9678, Mar. 3, 2010]

## **Other Requirements and Information**

### **§ 63.6665 What parts of the General Provisions apply to me?**

Table 8 to this subpart shows which parts of the General Provisions in §§ 63.1 through 63.15 apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with any of the requirements of the General Provisions specified in Table 8: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing stationary RICE that combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, an existing emergency stationary RICE, or an existing limited use stationary RICE. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in the General Provisions specified in Table 8 except for the initial notification requirements: A new stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new emergency stationary RICE, or a new limited use stationary RICE.

[75 FR 9678, Mar. 3, 2010]

### **§ 63.6670 Who implements and enforces this subpart?**

(a) This subpart is implemented and enforced by the U.S. EPA, or a delegated authority such as your State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency (as well as the U.S. EPA) has the authority to implement and enforce this subpart. You should contact your U.S. EPA Regional Office to find out whether this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under 40 CFR part 63, subpart E, the authorities contained in paragraph (c) of this section are retained by the Administrator of the U.S. EPA and are not transferred to the State, local, or tribal agency.

(c) The authorities that will not be delegated to State, local, or tribal agencies are:

(1) Approval of alternatives to the non-opacity emission limitations and operating limitations in § 63.6600 under § 63.6(g).

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

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

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

(5) Approval of a performance test which was conducted prior to the effective date of the rule, as specified in § 63.6610(b).

**§ 63.6675 What definitions apply to this subpart?**

Terms used in this subpart are defined in the Clean Air Act (CAA); in 40 CFR 63.2, the General Provisions of this part; and in this section as follows:

*Alaska Railbelt Grid* means the service areas of the six regulated public utilities that extend from Fairbanks to Anchorage and the Kenai Peninsula. These utilities are Golden Valley Electric Association; Chugach Electric Association; Matanuska Electric Association; Homer Electric Association; Anchorage Municipal Light & Power; and the City of Seward Electric System.

*Area source* means any stationary source of HAP that is not a major source as defined in part 63.

*Associated equipment* as used in this subpart and as referred to in section 112(n)(4) of the CAA, means equipment associated with an oil or natural gas exploration or production well, and includes all equipment from the well bore to the point of custody transfer, except glycol dehydration units, storage vessels with potential for flash emissions, combustion turbines, and stationary RICE.

*Backup power for renewable energy* means an engine that provides backup power to a facility that generates electricity from renewable energy resources, as that term is defined in Alaska Statute 42.45.045(l)(5) (incorporated by reference, see § 63.14).

*Black start engine* means an engine whose only purpose is to start up a combustion turbine.

*CAA* means the Clean Air Act (42 U.S.C. 7401 *et seq.*, as amended by Public Law 101-549, 104 Stat. 2399).

*Commercial emergency stationary RICE* means an emergency stationary RICE used in commercial establishments such as office buildings, hotels, stores, telecommunications facilities, restaurants, financial institutions such as banks, doctor's offices, and sports and performing arts facilities.

*Compression ignition* means relating to a type of stationary internal combustion engine that is not a spark ignition engine.

*Custody transfer* means the transfer of hydrocarbon liquids or natural gas: After processing and/or treatment in the producing operations, or from storage vessels or automatic transfer facilities or other such equipment, including product loading racks, to pipelines or any other forms of transportation. For the purposes of this subpart, the point at which such liquids or natural gas enters a natural gas processing plant is a point of custody transfer.

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

(1) Fails to meet any requirement or obligation established by this subpart, including but not limited to any emission limitation or operating limitation;

(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or

(3) Fails to meet any emission limitation or operating limitation in this subpart during malfunction, regardless of whether or not such failure is permitted by this subpart.

(4) Fails to satisfy the general duty to minimize emissions established by § 63.6(e)(1)(i).

*Diesel engine* means any stationary RICE in which a high boiling point liquid fuel injected into the combustion chamber ignites when the air charge has been compressed to a temperature sufficiently high for auto-ignition. This process is also known as compression ignition.

*Diesel fuel* means any liquid obtained from the distillation of petroleum with a boiling point of approximately 150 to 360 degrees Celsius. One commonly used form is fuel oil number 2. Diesel fuel also includes any non-distillate fuel with comparable physical and chemical properties ( e.g. biodiesel) that is suitable for use in compression ignition engines.

*Digester gas* means any gaseous by-product of wastewater treatment typically formed through the anaerobic decomposition of organic waste materials and composed principally of methane and CO<sub>2</sub> .

*Dual-fuel engine* means any stationary RICE in which a liquid fuel (typically diesel fuel) is used for compression ignition and gaseous fuel (typically natural gas) is used as the primary fuel.

*Emergency stationary RICE* means any stationary reciprocating internal combustion engine that meets all of the criteria in paragraphs (1) through (3) of this definition. All emergency stationary RICE must comply with the requirements specified in § 63.6640(f) in order to be considered emergency stationary RICE. If the engine does not comply with the requirements specified in § 63.6640(f), then it is not considered to be an emergency stationary RICE under this subpart.

(1) The stationary RICE is operated to provide electrical power or mechanical work during an emergency situation. Examples include stationary RICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary RICE used to pump water in the case of fire or flood, etc.

(2) The stationary RICE is operated under limited circumstances for situations not included in paragraph (1) of this definition, as specified in § 63.6640(f).

(3) The stationary RICE operates as part of a financial arrangement with another entity in situations not included in paragraph (1) of this definition only as allowed in § 63.6640(f)(2)(ii) or (iii) and § 63.6640(f)(4)(i) or (ii).

*Engine startup* means the time from initial start until applied load and engine and associated equipment reaches steady state or normal operation. For stationary engine with catalytic controls, engine startup means the time from initial start until applied load and engine and associated equipment, including the catalyst, reaches steady state or normal operation.

*Four-stroke engine* means any type of engine which completes the power cycle in two crankshaft revolutions, with intake and compression strokes in the first revolution and power and exhaust strokes in the second revolution.

*Gaseous fuel* means a material used for combustion which is in the gaseous state at standard atmospheric temperature and pressure conditions.

*Gasoline* means any fuel sold in any State for use in motor vehicles and motor vehicle engines, or nonroad or stationary engines, and commonly or commercially known or sold as gasoline.

*Glycol dehydration unit* means a device in which a liquid glycol (including, but not limited to, ethylene glycol, diethylene glycol, or triethylene glycol) absorbent directly contacts a natural gas stream and absorbs water in a contact tower or absorption column (absorber). The glycol contacts and absorbs water vapor and other gas stream constituents from the natural gas and becomes "rich" glycol. This glycol is then regenerated in the glycol dehydration unit reboiler. The "lean" glycol is then recycled.

*Hazardous air pollutants (HAP)* means any air pollutants listed in or pursuant to section 112(b) of the CAA.

*Institutional emergency stationary RICE* means an emergency stationary RICE used in institutional establishments such as medical centers, nursing homes, research centers, institutions of higher education, correctional facilities, elementary and secondary schools, libraries, religious establishments, police stations, and fire stations.

*ISO standard day conditions* means 288 degrees Kelvin (15 degrees Celsius), 60 percent relative humidity and 101.3 kilopascals pressure.

*Landfill gas* means a gaseous by-product of the land application of municipal refuse typically formed through the anaerobic decomposition of waste materials and composed principally of methane and CO<sub>2</sub>.

*Lean burn engine* means any two-stroke or four-stroke spark ignited engine that does not meet the definition of a rich burn engine.

*Limited use stationary RICE* means any stationary RICE that operates less than 100 hours per year.

*Liquefied petroleum gas* means any liquefied hydrocarbon gas obtained as a by-product in petroleum refining of natural gas production.

*Liquid fuel* means any fuel in liquid form at standard temperature and pressure, including but not limited to diesel, residual/crude oil, kerosene/naphtha (jet fuel), and gasoline.

*Major Source*, as used in this subpart, shall have the same meaning as in § 63.2, except that:

(1) Emissions from any oil or gas exploration or production well (with its associated equipment (as defined in this section)) and emissions from any pipeline compressor station or pump station shall not be aggregated with emissions from other similar units, to determine whether such emission points or stations are major sources, even when emission points are in a contiguous area or under common control;

(2) For oil and gas production facilities, emissions from processes, operations, or equipment that are not part of the same oil and gas production facility, as defined in § 63.1271 of subpart HHH of this part, shall not be aggregated;

(3) For production field facilities, only HAP emissions from glycol dehydration units, storage vessel with the potential for flash emissions, combustion turbines and reciprocating internal combustion engines shall be aggregated for a major source determination; and

(4) Emissions from processes, operations, and equipment that are not part of the same natural gas transmission and storage facility, as defined in § 63.1271 of subpart HHH of this part, shall not be aggregated.

*Malfunction* means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner which causes, or has the potential to cause, the emission limitations in an applicable standard to be exceeded. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

*Natural gas* means a naturally occurring mixture of hydrocarbon and non-hydrocarbon gases found in geologic formations beneath the Earth's surface, of which the principal constituent is methane. Natural gas may be field or pipeline quality.

*Non-selective catalytic reduction (NSCR)* means an add-on catalytic nitrogen oxides (NO<sub>x</sub>) control device for rich burn engines that, in a two-step reaction, promotes the conversion of excess oxygen, NO<sub>x</sub>, CO, and volatile organic compounds (VOC) into CO<sub>2</sub>, nitrogen, and water.

*Oil and gas production facility* as used in this subpart means any grouping of equipment where hydrocarbon liquids are processed, upgraded (i.e., remove impurities or other constituents to meet contract specifications), or stored prior to the point of custody transfer; or where natural gas is processed, upgraded, or stored prior to entering the natural gas transmission and storage source category. For purposes of a major source determination, facility (including a building, structure, or installation) means oil and natural gas production and processing equipment that is located within the boundaries of an individual surface site as defined in this section. Equipment that is part of a facility will typically be located within close proximity to other equipment located at the same facility. Pieces of production equipment or groupings of equipment located on different oil and gas leases, mineral fee tracts, lease tracts, subsurface or surface unit areas, surface fee tracts, surface lease tracts, or separate surface sites, whether or not connected by a road, waterway, power line or pipeline, shall not be considered part of the same facility. Examples of facilities in the oil and natural gas production source category include, but are not limited to, well sites, satellite tank batteries, central tank batteries, a compressor station that transports natural gas to a natural gas processing plant, and natural gas processing plants.

*Oxidation catalyst* means an add-on catalytic control device that controls CO and VOC by oxidation.

*Peaking unit or engine* means any standby engine intended for use during periods of high demand that are not emergencies.

*Percent load* means the fractional power of an engine compared to its maximum manufacturer's design capacity at engine site conditions. Percent load may range between 0 percent to above 100 percent.

*Potential to emit* means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the stationary source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable. For oil and natural gas production facilities subject to subpart HH of this part, the potential to emit provisions in § 63.760(a) may be used. For natural gas transmission and storage facilities subject to subpart HHH of this part, the maximum annual facility gas throughput for storage facilities may be determined according to § 63.1270(a)(1) and the maximum annual throughput for transmission facilities may be determined according to § 63.1270(a)(2).

*Production field facility* means those oil and gas production facilities located prior to the point of custody transfer.

*Production well* means any hole drilled in the earth from which crude oil, condensate, or field natural gas is extracted.

*Propane* means a colorless gas derived from petroleum and natural gas, with the molecular structure C<sub>3</sub>H<sub>8</sub>.

*Remote stationary RICE* means stationary RICE meeting any of the following criteria:

(1) Stationary RICE located in an offshore area that is beyond the line of ordinary low water along that portion of the coast of the United States that is in direct contact with the open seas and beyond the line marking the seaward limit of inland waters.

(2) Stationary RICE located on a pipeline segment that meets both of the criteria in paragraphs (2)(i) and (ii) of this definition.

(i) A pipeline segment with 10 or fewer buildings intended for human occupancy and no buildings with four or more stories within 220 yards (200 meters) on either side of the centerline of any continuous 1-mile (1.6 kilometers) length of pipeline. Each separate dwelling unit in a multiple dwelling unit building is counted as a separate building intended for human occupancy.

(ii) The pipeline segment does not lie within 100 yards (91 meters) of either a building or a small, well-defined outside area (such as a playground, recreation area, outdoor theater, or other place of public assembly) that is occupied by 20 or more persons on at least 5 days a week for 10 weeks in any 12-month period. The days and weeks need not be consecutive. The building or area is considered occupied for a full day if it is occupied for any portion of the day.

(iii) For purposes of this paragraph (2), the term pipeline segment means all parts of those physical facilities through which gas moves in transportation, including but not limited to pipe, valves, and other appurtenance attached to pipe, compressor units, metering stations, regulator stations, delivery stations, holders, and fabricated assemblies. Stationary RICE located within 50 yards (46 meters) of the pipeline segment providing power for equipment on a pipeline segment are part of the pipeline segment. Transportation of gas means the gathering, transmission, or distribution of gas by pipeline, or the storage of gas. A building is intended for human occupancy if its primary use is for a purpose involving the presence of humans.

(3) Stationary RICE that are not located on gas pipelines and that have 5 or fewer buildings intended for human occupancy and no buildings with four or more stories within a 0.25 mile radius around the engine. A building is intended for human occupancy if its primary use is for a purpose involving the presence of humans.

*Residential emergency stationary RICE* means an emergency stationary RICE used in residential establishments such as homes or apartment buildings.

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

*Rich burn engine* means any four-stroke spark ignited engine where the manufacturer's recommended operating air/fuel ratio divided by the stoichiometric air/fuel ratio at full load conditions is less than or equal to 1.1. Engines originally manufactured as rich burn engines, but modified prior to December 19, 2002 with passive emission control technology for NO<sub>x</sub> (such as pre-combustion chambers) will be considered lean burn engines. Also, existing engines where there are no manufacturer's recommendations regarding air/fuel ratio will be considered a rich burn engine if the excess oxygen content of the exhaust at full load conditions is less than or equal to 2 percent.

*Site-rated HP* means the maximum manufacturer's design capacity at engine site conditions.

*Spark ignition* means relating to either: A gasoline-fueled engine; or any other type of engine with a spark plug (or other sparking device) and with operating characteristics significantly similar to the theoretical Otto combustion cycle. Spark ignition engines usually use a throttle to regulate intake air flow to control power during normal operation. Dual-fuel engines in which a liquid fuel (typically diesel fuel) is used for CI and gaseous fuel (typically natural gas) is used as the primary fuel at an annual average ratio of less than 2 parts diesel fuel to 100 parts total fuel on an energy equivalent basis are spark ignition engines.

*Stationary reciprocating internal combustion engine (RICE)* means any reciprocating internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.

*Stationary RICE test cell/stand* means an engine test cell/stand, as defined in subpart PPPPP of this part, that tests stationary RICE.

*Stoichiometric* means the theoretical air-to-fuel ratio required for complete combustion.

*Storage vessel with the potential for flash emissions* means any storage vessel that contains a hydrocarbon liquid with a stock tank gas-to-oil ratio equal to or greater than 0.31 cubic meters per liter and an American Petroleum Institute gravity equal to or greater than 40 degrees and an actual annual average hydrocarbon liquid throughput equal to or greater than 79,500 liters per day. Flash emissions occur when dissolved hydrocarbons in the fluid evolve from solution when the fluid pressure is reduced.

*Subpart* means 40 CFR part 63, subpart ZZZZ.

*Surface site* means any combination of one or more graded pad sites, gravel pad sites, foundations, platforms, or the immediate physical location upon which equipment is physically affixed.

*Two-stroke engine* means a type of engine which completes the power cycle in single crankshaft revolution by combining the intake and compression operations into one stroke and the power and exhaust operations into a second stroke. This system requires auxiliary scavenging and inherently runs lean of stoichiometric.

[69 FR 33506, June 15, 2004, as amended at 71 FR 20467, Apr. 20, 2006; 73 FR 3607, Jan. 18, 2008; 75 FR 9679, Mar. 3, 2010; 75 FR 51592, Aug. 20, 2010; 76 FR 12867, Mar. 9, 2011; 78 FR 6706, Jan. 30, 2013]

**Table 1 a to Subpart ZZZZ of Part 63—Emission Limitations for Existing, New, and Reconstructed Spark Ignition, 4SRB Stationary RICE > 500 HP Located at a Major Source of HAP Emissions**

As stated in §§ 63.6600 and 63.6640, you must comply with the following emission limitations at 100 percent load plus or minus 10 percent for existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions:

For each . . .	You must meet the following emission limitation, except during periods of startup . . .	During periods of startup you must . . .
1. 4SRB stationary RICE	a. Reduce formaldehyde emissions by 76 percent or more. If you commenced construction or reconstruction between	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe

For each . . .	You must meet the following emission limitation, except during periods of startup . . .	During periods of startup you must . . .
	December 19, 2002 and June 15, 2004, you may reduce formaldehyde emissions by 75 percent or more until June 15, 2007 or	loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. <sup>1</sup>
	b. Limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O <sub>2</sub>	

<sup>1</sup>Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.

[75 FR 9679, Mar. 3, 2010, as amended at 75 FR 51592, Aug. 20, 2010]

**Table 1 b to Subpart ZZZZ of Part 63—Operating Limitations for Existing, New, and Reconstructed SI 4SRB Stationary RICE >500 HP Located at a Major Source of HAP Emissions**

As stated in §§ 63.6600, 63.6603, 63.6630 and 63.6640, you must comply with the following operating limitations for existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions:

For each . . .	You must meet the following operating limitation, except during periods of startup . . .
1. existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions complying with the requirement to reduce formaldehyde emissions by 76 percent or more (or by 75 percent or more, if applicable) and using NSCR; or existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O <sub>2</sub> and using NSCR;	a. maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst measured during the initial performance test; and b. maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 750 °F and less than or equal to 1250 °F. <sup>1</sup>
2. existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions complying with the requirement to reduce formaldehyde emissions by 76 percent or more (or by 75 percent or more, if applicable) and not using NSCR; or	Comply with any operating limitations approved by the Administrator.
existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O <sub>2</sub> and not using NSCR.	

<sup>1</sup> Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.8(f) for a different temperature range.

[78 FR 6706, Jan. 30, 2013]

**Table 2 a to Subpart ZZZZ of Part 63—Emission Limitations for New and Reconstructed 2SLB and Compression Ignition Stationary RICE >500 HP and New and Reconstructed 4SLB Stationary RICE ≥250 HP Located at a Major Source of HAP Emissions**

As stated in §§ 63.6600 and 63.6640, you must comply with the following emission limitations for new and reconstructed lean burn and new and reconstructed compression ignition stationary RICE at 100 percent load plus or minus 10 percent:

For each . . .	You must meet the following emission limitation, except during periods of startup . . .	During periods of startup you must . . .
1. 2SLB stationary RICE	a. Reduce CO emissions by 58 percent or more; or b. Limit concentration of formaldehyde in the stationary RICE exhaust to 12 ppmvd or less at 15 percent O <sub>2</sub> . If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004, you may limit concentration of formaldehyde to 17 ppmvd or less at 15 percent O <sub>2</sub> until June 15, 2007	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. <sup>1</sup>
2. 4SLB stationary RICE	a. Reduce CO emissions by 93 percent or more; or	
	b. Limit concentration of formaldehyde in the stationary RICE exhaust to 14 ppmvd or less at 15 percent O <sub>2</sub>	
3. CI stationary RICE	a. Reduce CO emissions by 70 percent or more; or	
	b. Limit concentration of formaldehyde in the stationary RICE exhaust to 580 ppbvd or less at 15 percent O <sub>2</sub>	

<sup>1</sup> Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.

[75 FR 9680, Mar. 3, 2010]

**Table 2 b to Subpart ZZZZ of Part 63—Operating Limitations for New and Reconstructed 2SLB and CI Stationary RICE >500 HP Located at a Major Source of HAP Emissions, New and Reconstructed 4SLB Stationary RICE ≥250 HP Located at a Major Source of HAP Emissions, Existing CI Stationary RICE >500 HP**

As stated in §§ 63.6600, 63.6601, 63.6603, 63.6630, and 63.6640, you must comply with the following operating limitations for new and reconstructed 2SLB and CI stationary RICE >500 HP located at a major source of HAP emissions; new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions; and existing CI stationary RICE >500 HP:

For each . . .	You must meet the following operating limitation, except during periods of startup . . .
<p>1. New and reconstructed 2SLB and CI stationary RICE &gt;500 HP located at a major source of HAP emissions and new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions complying with the requirement to reduce CO emissions and using an oxidation catalyst; and New and reconstructed 2SLB and CI stationary RICE &gt;500 HP located at a major source of HAP emissions and new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and using an oxidation catalyst.</p>	<p>a. maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst that was measured during the initial performance test; and b. maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F.<sup>1</sup></p>
<p>2. Existing CI stationary RICE &gt;500 HP complying with the requirement to limit or reduce the concentration of CO in the stationary RICE exhaust and using an oxidation catalyst</p>	<p>a. maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water from the pressure drop across the catalyst that was measured during the initial performance test; and</p>
	<p>b. maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F.<sup>1</sup></p>
<p>3. New and reconstructed 2SLB and CI stationary RICE &gt;500 HP located at a major source of HAP emissions and new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions complying with the requirement to reduce CO emissions and not using an oxidation catalyst; and</p>	<p>Comply with any operating limitations approved by the Administrator.</p>
<p>New and reconstructed 2SLB and CI stationary RICE &gt;500 HP located at a major source of HAP emissions and new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and not using an oxidation catalyst; and</p>	
<p>existing CI stationary RICE &gt;500 HP complying with the requirement to limit or reduce the concentration of CO in the stationary RICE exhaust and not using an oxidation catalyst.</p>	

<sup>1</sup> Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.8(f) for a different temperature range.

**Table 2 c to Subpart ZZZZ of Part 63—Requirements for Existing Compression Ignition Stationary RICE Located at a Major Source of HAP Emissions and Existing Spark Ignition Stationary RICE ≤500 HP Located at a Major Source of HAP Emissions**

As stated in §§ 63.6600, 63.6602, and 63.6640, you must comply with the following requirements for existing compression ignition stationary RICE located at a major source of HAP emissions and existing spark ignition stationary RICE ≤500 HP located at a major source of HAP emissions:

<b>For each . . .</b>	<b>You must meet the following requirement, except during periods of startup . . .</b>	<b>During periods of startup you must . . .</b>
1. Emergency stationary CI RICE and black start stationary CI RICE <sup>1</sup>	a. Change oil and filter every 500 hours of operation or annually, whichever comes first. <sup>2</sup> b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. <sup>3</sup>	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. <sup>3</sup>
2. Non-Emergency, non-black start stationary CI RICE <100 HP	a. Change oil and filter every 1,000 hours of operation or annually, whichever comes first. <sup>2</sup> b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. <sup>3</sup>	
3. Non-Emergency, non-black start CI stationary RICE 100≤HP≤300 HP	Limit concentration of CO in the stationary RICE exhaust to 230 ppmvd or less at 15 percent O <sub>2</sub> .	
4. Non-Emergency, non-black start CI stationary RICE 300<HP≤500	a. Limit concentration of CO in the stationary RICE exhaust to 49 ppmvd or less at 15 percent O <sub>2</sub> ; or b. Reduce CO emissions by 70 percent or more.	
5. Non-Emergency, non-black start	a. Limit concentration of CO	

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
stationary CI RICE >500 HP	in the stationary RICE exhaust to 23 ppmvd or less at 15 percent O <sub>2</sub> ; or b. Reduce CO emissions by 70 percent or more.	
6. Emergency stationary SI RICE and black start stationary SI RICE. <sup>1</sup>	a. Change oil and filter every 500 hours of operation or annually, whichever comes first; <sup>2</sup> b. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. <sup>3</sup>	
7. Non-Emergency, non-black start stationary SI RICE <100 HP that are not 2SLB stationary RICE	a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first; <sup>2</sup> b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first, and replace as necessary;	
	c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary. <sup>3</sup>	
8. Non-Emergency, non-black start 2SLB stationary SI RICE <100 HP	a. Change oil and filter every 4,320 hours of operation or annually, whichever comes first; <sup>2</sup> b. Inspect spark plugs every 4,320 hours of operation or annually, whichever comes first, and replace as necessary;	
	c. Inspect all hoses and belts every 4,320 hours of operation or annually, whichever comes first, and replace as necessary. <sup>3</sup>	

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
9. Non-emergency, non-black start 2SLB stationary RICE 100≤HP≤500	Limit concentration of CO in the stationary RICE exhaust to 225 ppmvd or less at 15 percent O <sub>2</sub> .	
10. Non-emergency, non-black start 4SLB stationary RICE 100≤HP≤500	Limit concentration of CO in the stationary RICE exhaust to 47 ppmvd or less at 15 percent O <sub>2</sub> .	
11. Non-emergency, non-black start 4SRB stationary RICE 100≤HP≤500	Limit concentration of formaldehyde in the stationary RICE exhaust to 10.3 ppmvd or less at 15 percent O <sub>2</sub> .	
12. Non-emergency, non-black start stationary RICE 100≤HP≤500 which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis	Limit concentration of CO in the stationary RICE exhaust to 177 ppmvd or less at 15 percent O <sub>2</sub> .	

<sup>1</sup> If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule required in Table 2c of this subpart, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to perform the work practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable.

<sup>2</sup> Sources have the option to utilize an oil analysis program as described in § 63.6625(i) or (j) in order to extend the specified oil change requirement in Table 2c of this subpart.

<sup>3</sup> Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.

[78 FR 6708, Jan. 30, 2013, as amended at 78 FR 14457, Mar. 6, 2013]

**Table 2 d to Subpart ZZZZ of Part 63—Requirements for Existing Stationary RICE Located at Area Sources of HAP Emissions**

As stated in §§ 63.6603 and 63.6640, you must comply with the following requirements for existing stationary RICE located at area sources of HAP emissions:

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
1. Non-Emergency, non-black start CI stationary RICE $\leq 300$ HP	a. Change oil and filter every 1,000 hours of operation or annually, whichever comes first; <sup>1</sup> b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.
2. Non-Emergency, non-black start CI stationary RICE $300 < \text{HP} \leq 500$	a. Limit concentration of CO in the stationary RICE exhaust to 49 ppmvd at 15 percent O <sub>2</sub> ; or	
	b. Reduce CO emissions by 70 percent or more.	
3. Non-Emergency, non-black start CI stationary RICE $> 500$ HP	a. Limit concentration of CO in the stationary RICE exhaust to 23 ppmvd at 15 percent O <sub>2</sub> ; or	
	b. Reduce CO emissions by 70 percent or more.	
4. Emergency stationary CI RICE and black start stationary CI RICE. <sup>2</sup>	a. Change oil and filter every 500 hours of operation or annually, whichever comes first; <sup>1</sup>	
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and	
	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as	

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
	necessary.	
5. Emergency stationary SI RICE; black start stationary SI RICE; non-emergency, non-black start 4SLB stationary RICE >500 HP that operate 24 hours or less per calendar year; non-emergency, non-black start 4SRB stationary RICE >500 HP that operate 24 hours or less per calendar year. <sup>2</sup>	a. Change oil and filter every 500 hours of operation or annually, whichever comes first; <sup>1</sup> b. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	
6. Non-emergency, non-black start 2SLB stationary RICE	a. Change oil and filter every 4,320 hours of operation or annually, whichever comes first; <sup>1</sup>	
	b. Inspect spark plugs every 4,320 hours of operation or annually, whichever comes first, and replace as necessary; and	
	c. Inspect all hoses and belts every 4,320 hours of operation or annually, whichever comes first, and replace as necessary.	
7. Non-emergency, non-black start 4SLB stationary RICE ≤500 HP	a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first; <sup>1</sup>	
	b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first, and replace as necessary; and	
	c. Inspect all hoses and belts every 1,440 hours	

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
	of operation or annually, whichever comes first, and replace as necessary.	
8. Non-emergency, non-black start 4SLB remote stationary RICE >500 HP	a. Change oil and filter every 2,160 hours of operation or annually, whichever comes first; <sup>1</sup>	
	b. Inspect spark plugs every 2,160 hours of operation or annually, whichever comes first, and replace as necessary; and	
	c. Inspect all hoses and belts every 2,160 hours of operation or annually, whichever comes first, and replace as necessary.	
9. Non-emergency, non-black start 4SLB stationary RICE >500 HP that are not remote stationary RICE and that operate more than 24 hours per calendar year	Install an oxidation catalyst to reduce HAP emissions from the stationary RICE.	
10. Non-emergency, non-black start 4SRB stationary RICE ≤500 HP	a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first; <sup>1</sup>	
	b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first, and replace as necessary; and	
	c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.	
11. Non-emergency, non-black start 4SRB remote stationary RICE >500 HP	a. Change oil and filter every 2,160 hours of operation or annually, whichever comes first; <sup>1</sup>	

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
	b. Inspect spark plugs every 2,160 hours of operation or annually, whichever comes first, and replace as necessary; and	
	c. Inspect all hoses and belts every 2,160 hours of operation or annually, whichever comes first, and replace as necessary.	
12. Non-emergency, non-black start 4SRB stationary RICE >500 HP that are not remote stationary RICE and that operate more than 24 hours per calendar year	Install NSCR to reduce HAP emissions from the stationary RICE.	
13. Non-emergency, non-black start stationary RICE which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis	a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first; <sup>1</sup> b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first, and replace as necessary; and	
	c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.	

<sup>1</sup> Sources have the option to utilize an oil analysis program as described in § 63.6625(i) or (j) in order to extend the specified oil change requirement in Table 2d of this subpart.

<sup>2</sup> If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of this subpart, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable.

**Table 3 to Subpart ZZZZ of Part 63—Subsequent Performance Tests**

As stated in §§ 63.6615 and 63.6620, you must comply with the following subsequent performance test requirements:

<b>For each . . .</b>	<b>Complying with the requirement to . . .</b>	<b>You must . . .</b>
1. New or reconstructed 2SLB stationary RICE >500 HP located at major sources; new or reconstructed 4SLB stationary RICE ≥250 HP located at major sources; and new or reconstructed CI stationary RICE >500 HP located at major sources	Reduce CO emissions and not using a CEMS	Conduct subsequent performance tests semiannually. <sup>1</sup>
2. 4SRB stationary RICE ≥5,000 HP located at major sources	Reduce formaldehyde emissions	Conduct subsequent performance tests semiannually. <sup>1</sup>
3. Stationary RICE >500 HP located at major sources and new or reconstructed 4SLB stationary RICE 250≤HP≤500 located at major sources	Limit the concentration of formaldehyde in the stationary RICE exhaust	Conduct subsequent performance tests semiannually. <sup>1</sup>
4. Existing non-emergency, non-black start CI stationary RICE >500 HP that are not limited use stationary RICE	Limit or reduce CO emissions and not using a CEMS	Conduct subsequent performance tests every 8,760 hours or 3 years, whichever comes first.
5. Existing non-emergency, non-black start CI stationary RICE >500 HP that are limited use stationary RICE	Limit or reduce CO emissions and not using a CEMS	Conduct subsequent performance tests every 8,760 hours or 5 years, whichever comes first.

<sup>1</sup> After you have demonstrated compliance for two consecutive tests, you may reduce the frequency of subsequent performance tests to annually. If the results of any subsequent annual performance test indicate the stationary RICE is not in compliance with the CO or formaldehyde emission limitation, or you deviate from any of your operating limitations, you must resume semiannual performance tests.

[78 FR 6711, Jan. 30, 2013]

**Table 4 to Subpart ZZZZ of Part 63—Requirements for Performance Tests**

As stated in §§ 63.6610, 63.6611, 63.6612, 63.6620, and 63.6640, you must comply with the following requirements for performance tests for stationary RICE:

<b>For each . . .</b>	<b>Complying with the requirement to . . .</b>	<b>You must . . .</b>	<b>Using . . .</b>	<b>According to the following requirements . . .</b>
1. 2SLB, 4SLB, and CI stationary RICE	a. reduce CO emissions	i. Measure the O <sub>2</sub> at the inlet and outlet of the control device; and	(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A, or ASTM Method D6522-00 (Reapproved 2005). <sup>a,c</sup>	(a) Measurements to determine O <sub>2</sub> must be made at the same time as the measurements for CO concentration.

For each . . .	Complying with the requirement to . . .	You must . . .	Using . . .	According to the following requirements . . .
		ii. Measure the CO at the inlet and the outlet of the control device	(1) ASTM D6522-00 (Reapproved 2005) <sup>a b c</sup> or Method 10 of 40 CFR part 60, appendix A	(a) The CO concentration must be at 15 percent O <sub>2</sub> , dry basis.
2. 4SRB stationary RICE	a. reduce formaldehyde emissions	i. Select the sampling port location and the number of traverse points; and	(1) Method 1 or 1A of 40 CFR part 60, appendix A § 63.7(d)(1)(i)	(a) sampling sites must be located at the inlet and outlet of the control device.
		ii. Measure O <sub>2</sub> at the inlet and outlet of the control device; and	(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A, or ASTM Method D6522-00 (Reapproved 2005). <sup>a</sup>	(a) measurements to determine O <sub>2</sub> concentration must be made at the same time as the measurements for formaldehyde or THC concentration.
		iii. Measure moisture content at the inlet and outlet of the control device; and	(1) Method 4 of 40 CFR part 60, appendix A, or Test Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03. <sup>a</sup>	(a) measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde or THC concentration.
		iv. If demonstrating compliance with the formaldehyde percent reduction requirement, measure formaldehyde at the inlet and the outlet of the control device	(1) Method 320 or 323 of 40 CFR part 63, appendix A; or ASTM D6348-03, <sup>a</sup> provided in ASTM D6348-03 Annex A5 (Analyte Spiking Technique), the percent R must be greater than or equal to 70 and less than or equal to 130	(a) formaldehyde concentration must be at 15 percent O <sub>2</sub> , dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
		v. If demonstrating compliance with the THC percent reduction requirement, measure THC at the inlet and the outlet of the control device	(1) Method 25A, reported as propane, of 40 CFR part 60, appendix A	(a) THC concentration must be at 15 percent O <sub>2</sub> , dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
3. Stationary RICE	a. limit the concentration of formaldehyde or CO in the stationary RICE exhaust	i. Select the sampling port location and the number of traverse points; and	(1) Method 1 or 1A of 40 CFR part 60, appendix A § 63.7(d)(1)(i)	(a) if using a control device, the sampling site must be located at the outlet of the control device.

For each . . .	Complying with the requirement to . . .	You must . . .	Using . . .	According to the following requirements . . .
		ii. Determine the O <sub>2</sub> concentration of the stationary RICE exhaust at the sampling port location; and	(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A, or ASTM Method D6522-00 (Reapproved 2005). <sup>a</sup>	(a) measurements to determine O <sub>2</sub> concentration must be made at the same time and location as the measurements for formaldehyde or CO concentration.
		iii. Measure moisture content of the stationary RICE exhaust at the sampling port location; and	(1) Method 4 of 40 CFR part 60, appendix A, or Test Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03. <sup>a</sup>	(a) measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde or CO concentration.
		iv. Measure formaldehyde at the exhaust of the stationary RICE; or	(1) Method 320 or 323 of 40 CFR part 63, appendix A; or ASTM D6348-03, <sup>a</sup> provided in ASTM D6348-03 Annex A5 (Analyte Spiking Technique), the percent R must be greater than or equal to 70 and less than or equal to 130	(a) Formaldehyde concentration must be at 15 percent O <sub>2</sub> , dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
		v. measure CO at the exhaust of the stationary RICE.	(1) Method 10 of 40 CFR part 60, appendix A, ASTM Method D6522-00 (2005), <sup>a</sup> <sup>c</sup> Method 320 of 40 CFR part 63, appendix A, or ASTM D6348-03. <sup>a</sup>	(a) CO concentration must be at 15 percent O <sub>2</sub> , dry basis. Results of this test consist of the average of the three 1-hour or longer runs.

<sup>a</sup> Incorporated by reference, see 40 CFR 63.14. You may also obtain copies from University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.

<sup>b</sup> You may also use Method 320 of 40 CFR part 63, appendix A, or ASTM D6348-03.

<sup>c</sup> ASTM-D6522-00 (2005) may be used to test both CI and SI stationary RICE.

[78 FR 6711, Jan. 30, 2013]

**Table 5 to Subpart ZZZZ of Part 63—Initial Compliance With Emission Limitations, Operating Limitations, and Other Requirements**

As stated in §§ 63.6612, 63.6625 and 63.6630, you must initially comply with the emission and operating limitations as required by the following:

For each . . .	Complying with the requirement to . . .	You have demonstrated initial compliance if . . .
<p>1. New or reconstructed non-emergency 2SLB stationary RICE &gt;500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, non-emergency stationary CI RICE &gt;500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE &gt;500 HP located at an area source of HAP</p>	<p>a. Reduce CO emissions and using oxidation catalyst, and using a CPMS</p>	<p>i. The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in § 63.6625(b); and iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.</p>
<p>2. Non-emergency stationary CI RICE &gt;500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE &gt;500 HP located at an area source of HAP</p>	<p>a. Limit the concentration of CO, using oxidation catalyst, and using a CPMS</p>	<p>i. The average CO concentration determined from the initial performance test is less than or equal to the CO emission limitation; and</p>
		<p>ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in § 63.6625(b); and</p>
		<p>iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.</p>
<p>3. New or reconstructed non-emergency 2SLB stationary RICE &gt;500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, non-emergency stationary CI RICE &gt;500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE &gt;500 HP located at an area source of HAP</p>	<p>a. Reduce CO emissions and not using oxidation catalyst</p>	<p>i. The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in § 63.6625(b); and iii. You have recorded the approved operating parameters (if any) during the initial performance test.</p>
<p>4. Non-emergency stationary CI RICE &gt;500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE &gt;500 HP located at an area source of HAP</p>	<p>a. Limit the concentration of CO, and not using oxidation catalyst</p>	<p>i. The average CO concentration determined from the initial performance test is less than or equal to the CO emission limitation; and ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in § 63.6625(b); and</p>
		<p>iii. You have recorded the approved operating parameters (if any) during the</p>

		initial performance test.
5. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP	a. Reduce CO emissions, and using a CEMS	i. You have installed a CEMS to continuously monitor CO and either O <sub>2</sub> or CO <sub>2</sub> at both the inlet and outlet of the oxidation catalyst according to the requirements in § 63.6625(a); and ii. You have conducted a performance evaluation of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B; and
		iii. The average reduction of CO calculated using § 63.6620 equals or exceeds the required percent reduction. The initial test comprises the first 4-hour period after successful validation of the CEMS. Compliance is based on the average percent reduction achieved during the 4-hour period.
6. Non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP	a. Limit the concentration of CO, and using a CEMS	i. You have installed a CEMS to continuously monitor CO and either O <sub>2</sub> or CO <sub>2</sub> at the outlet of the oxidation catalyst according to the requirements in § 63.6625(a); and
		ii. You have conducted a performance evaluation of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B; and
		iii. The average concentration of CO calculated using § 63.6620 is less than or equal to the CO emission limitation. The initial test comprises the first 4-hour period after successful validation of the CEMS. Compliance is based on the average concentration measured during the 4-hour period.
7. Non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP	a. Reduce formaldehyde emissions and using NSCR	i. The average reduction of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction, or the average reduction of emissions of THC determined from the initial performance test is equal to or greater than 30 percent; and
		ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in § 63.6625(b); and

		iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
8. Non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP	a. Reduce formaldehyde emissions and not using NSCR	i. The average reduction of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction or the average reduction of emissions of THC determined from the initial performance test is equal to or greater than 30 percent; and
		ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in § 63.6625(b); and
		iii. You have recorded the approved operating parameters (if any) during the initial performance test.
9. New or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE $250 \leq \text{HP} \leq 500$ located at a major source of HAP, and existing non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and using oxidation catalyst or NSCR	i. The average formaldehyde concentration, corrected to 15 percent O <sub>2</sub> , dry basis, from the three test runs is less than or equal to the formaldehyde emission limitation; and ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in § 63.6625(b); and
		iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
10. New or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE $250 \leq \text{HP} \leq 500$ located at a major source of HAP, and existing non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and not using oxidation catalyst or NSCR	i. The average formaldehyde concentration, corrected to 15 percent O <sub>2</sub> , dry basis, from the three test runs is less than or equal to the formaldehyde emission limitation; and ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in § 63.6625(b); and
		iii. You have recorded the approved operating parameters (if any) during the initial performance test.
11. Existing non-emergency stationary RICE $100 \leq \text{HP} \leq 500$ located at a major	a. Reduce CO emissions	i. The average reduction of emissions of CO or formaldehyde, as applicable

source of HAP, and existing non-emergency stationary CI RICE 300<HP≤500 located at an area source of HAP		determined from the initial performance test is equal to or greater than the required CO or formaldehyde, as applicable, percent reduction.
12. Existing non-emergency stationary RICE 100≤HP≤500 located at a major source of HAP, and existing non-emergency stationary CI RICE 300<HP≤500 located at an area source of HAP	a. Limit the concentration of formaldehyde or CO in the stationary RICE exhaust	i. The average formaldehyde or CO concentration, as applicable, corrected to 15 percent O <sub>2</sub> , dry basis, from the three test runs is less than or equal to the formaldehyde or CO emission limitation, as applicable.
13. Existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year	a. Install an oxidation catalyst	i. You have conducted an initial compliance demonstration as specified in § 63.6630(e) to show that the average reduction of emissions of CO is 93 percent or more, or the average CO concentration is less than or equal to 47 ppmvd at 15 percent O <sub>2</sub> ;
		ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in § 63.6625(b), or you have installed equipment to automatically shut down the engine if the catalyst inlet temperature exceeds 1350 °F.
14. Existing non-emergency 4SRB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year	a. Install NSCR	i. You have conducted an initial compliance demonstration as specified in § 63.6630(e) to show that the average reduction of emissions of CO is 75 percent or more, the average CO concentration is less than or equal to 270 ppmvd at 15 percent O <sub>2</sub> , or the average reduction of emissions of THC is 30 percent or more;
		ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in § 63.6625(b), or you have installed equipment to automatically shut down the engine if the catalyst inlet temperature exceeds 1250 °F.

[78 FR 6712, Jan. 30, 2013]

**Table 6 to Subpart ZZZZ of Part 63—Continuous Compliance With Emission Limitations, and Other Requirements**

As stated in § 63.6640, you must continuously comply with the emissions and operating limitations and work or management practices as required by the following:

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
<p>1. New or reconstructed non-emergency 2SLB stationary RICE &gt;500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, and new or reconstructed non-emergency CI stationary RICE &gt;500 HP located at a major source of HAP</p>	<p>a. Reduce CO emissions and using an oxidation catalyst, and using a CPMS</p>	<p>i. Conducting semiannual performance tests for CO to demonstrate that the required CO percent reduction is achieved<sup>a</sup>; and ii. Collecting the catalyst inlet temperature data according to § 63.6625(b); and iii. Reducing these data to 4-hour rolling averages; and</p>
		<p>iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and</p>
		<p>v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.</p>
<p>2. New or reconstructed non-emergency 2SLB stationary RICE &gt;500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, and new or reconstructed non-emergency CI stationary RICE &gt;500 HP located at a major source of HAP</p>	<p>a. Reduce CO emissions and not using an oxidation catalyst, and using a CPMS</p>	<p>i. Conducting semiannual performance tests for CO to demonstrate that the required CO percent reduction is achieved<sup>a</sup>; and ii. Collecting the approved operating parameter (if any) data according to § 63.6625(b); and iii. Reducing these data to 4-hour rolling averages; and</p>
		<p>iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.</p>
<p>3. New or reconstructed non-emergency 2SLB stationary RICE &gt;500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, new or reconstructed non-emergency stationary CI RICE &gt;500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE &gt;500 HP</p>	<p>a. Reduce CO emissions or limit the concentration of CO in the stationary RICE exhaust, and using a CEMS</p>	<p>i. Collecting the monitoring data according to § 63.6625(a), reducing the measurements to 1-hour averages, calculating the percent reduction or concentration of CO emissions according to § 63.6620; and ii. Demonstrating that the catalyst achieves the required percent reduction of CO emissions over the 4-hour averaging period, or that the emission remain at or below the CO concentration limit; and</p>
		<p>iii. Conducting an annual RATA of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B, as well as daily and periodic data quality checks in</p>

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
		accordance with 40 CFR part 60, appendix F, procedure 1.
4. Non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP	a. Reduce formaldehyde emissions and using NSCR	i. Collecting the catalyst inlet temperature data according to § 63.6625(b); and
		ii. Reducing these data to 4-hour rolling averages; and
		iii. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
		iv. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
5. Non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP	a. Reduce formaldehyde emissions and not using NSCR	i. Collecting the approved operating parameter (if any) data according to § 63.6625(b); and
		ii. Reducing these data to 4-hour rolling averages; and
		iii. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.
6. Non-emergency 4SRB stationary RICE with a brake HP ≥5,000 located at a major source of HAP	a. Reduce formaldehyde emissions	Conducting semiannual performance tests for formaldehyde to demonstrate that the required formaldehyde percent reduction is achieved, or to demonstrate that the average reduction of emissions of THC determined from the performance test is equal to or greater than 30 percent. <sup>a</sup>
7. New or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP and new or reconstructed non-emergency 4SLB stationary RICE 250≤HP≤500 located at a major source of HAP	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and using oxidation catalyst or NSCR	i. Conducting semiannual performance tests for formaldehyde to demonstrate that your emissions remain at or below the formaldehyde concentration limit <sup>a</sup> ; and ii. Collecting the catalyst inlet temperature data according to § 63.6625(b); and
		iii. Reducing these data to 4-hour rolling

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
		averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
		v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
8. New or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP and new or reconstructed non-emergency 4SLB stationary RICE 250≤HP≤500 located at a major source of HAP	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and not using oxidation catalyst or NSCR	i. Conducting semiannual performance tests for formaldehyde to demonstrate that your emissions remain at or below the formaldehyde concentration limit <sup>a</sup> ; and ii. Collecting the approved operating parameter (if any) data according to § 63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.
9. Existing emergency and black start stationary RICE ≤500 HP located at a major source of HAP, existing non-emergency stationary RICE <100 HP located at a major source of HAP, existing emergency and black start stationary RICE located at an area source of HAP, existing non-emergency stationary CI RICE ≤300 HP located at an area source of HAP, existing non-emergency 2SLB stationary RICE located at an area source of HAP, existing non-emergency stationary SI RICE located at an area source of HAP which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, existing non-emergency 4SLB and 4SRB stationary RICE ≤500 HP located at an area source of HAP, existing non-emergency 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate 24 hours or less per calendar	a. Work or Management practices	i. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or ii. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
year, and existing non-emergency 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that are remote stationary RICE		
10. Existing stationary CI RICE >500 HP that are not limited use stationary RICE	a. Reduce CO emissions, or limit the concentration of CO in the stationary RICE exhaust, and using oxidation catalyst	i. Conducting performance tests every 8,760 hours or 3 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and
		ii. Collecting the catalyst inlet temperature data according to § 63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
		v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
11. Existing stationary CI RICE >500 HP that are not limited use stationary RICE	a. Reduce CO emissions, or limit the concentration of CO in the stationary RICE exhaust, and not using oxidation catalyst	i. Conducting performance tests every 8,760 hours or 3 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and
		ii. Collecting the approved operating parameter (if any) data according to § 63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
12. Existing limited use CI stationary RICE >500 HP	a. Reduce CO emissions or limit the concentration of CO in the stationary RICE exhaust, and using an oxidation catalyst	i. Conducting performance tests every 8,760 hours or 5 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and
		ii. Collecting the catalyst inlet temperature data according to § 63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
		v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
13. Existing limited use CI stationary RICE >500 HP	a. Reduce CO emissions or limit the concentration of CO in the stationary RICE exhaust, and not using an oxidation catalyst	i. Conducting performance tests every 8,760 hours or 5 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and
		ii. Collecting the approved operating parameter (if any) data according to § 63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.
14. Existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that are operated	a. Install an oxidation catalyst	i. Conducting annual compliance demonstrations as specified in § 63.6640(c) to show that the average reduction of emissions of CO is 93

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
more than 24 hours per calendar year		percent or more, or the average CO concentration is less than or equal to 47 ppmvd at 15 percent O <sub>2</sub> ; and either ii. Collecting the catalyst inlet temperature data according to § 63.6625(b), reducing these data to 4-hour rolling averages; and maintaining the 4-hour rolling averages within the limitation of greater than 450 °F and less than or equal to 1350 °F for the catalyst inlet temperature; or iii. Immediately shutting down the engine if the catalyst inlet temperature exceeds 1350 °F.
15. Existing non-emergency 4SRB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year	a. Install NSCR	i. Conducting annual compliance demonstrations as specified in § 63.6640(c) to show that the average reduction of emissions of CO is 75 percent or more, the average CO concentration is less than or equal to 270 ppmvd at 15 percent O <sub>2</sub> , or the average reduction of emissions of THC is 30 percent or more; and either ii. Collecting the catalyst inlet temperature data according to § 63.6625(b), reducing these data to 4-hour rolling averages; and maintaining the 4-hour rolling averages within the limitation of greater than or equal to 750 °F and less than or equal to 1250 °F for the catalyst inlet temperature; or iii. Immediately shutting down the engine if the catalyst inlet temperature exceeds 1250 °F.

<sup>a</sup> After you have demonstrated compliance for two consecutive tests, you may reduce the frequency of subsequent performance tests to annually. If the results of any subsequent annual performance test indicate the stationary RICE is not in compliance with the CO or formaldehyde emission limitation, or you deviate from any of your operating limitations, you must resume semiannual performance tests.

[78 FR 6715, Jan. 30, 2013]

**Table 7 to Subpart ZZZZ of Part 63—Requirements for Reports**

As stated in § 63.6650, you must comply with the following requirements for reports:

For each . . .	You must submit a . . .	The report must contain . . .	You must submit the report . . .

For each . . .	You must submit a . . .	The report must contain . . .	You must submit the report . . .
<p>1. Existing non-emergency, non-black start stationary RICE <math>100 \leq \text{HP} \leq 500</math> located at a major source of HAP; existing non-emergency, non-black start stationary CI RICE <math>&gt;500</math> HP located at a major source of HAP; existing non-emergency 4SRB stationary RICE <math>&gt;500</math> HP located at a major source of HAP; existing non-emergency, non-black start stationary CI RICE <math>&gt;300</math> HP located at an area source of HAP; new or reconstructed non-emergency stationary RICE <math>&gt;500</math> HP located at a major source of HAP; and new or reconstructed non-emergency 4SLB stationary RICE <math>250 \leq \text{HP} \leq 500</math> located at a major source of HAP</p>	<p>Compliance report</p>	<p>a. If there are no deviations from any emission limitations or operating limitations that apply to you, a statement that there were no deviations from the emission limitations or operating limitations during the reporting period. If there were no periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in § 63.8(c)(7), a statement that there were not periods during which the CMS was out-of-control during the reporting period; or</p>	<p>i. Semiannually according to the requirements in § 63.6650(b)(1)-(5) for engines that are not limited use stationary RICE subject to numerical emission limitations; and ii. Annually according to the requirements in § 63.6650(b)(6)-(9) for engines that are limited use stationary RICE subject to numerical emission limitations.</p>
		<p>b. If you had a deviation from any emission limitation or operating limitation during the reporting period, the information in § 63.6650(d). If there were periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in § 63.8(c)(7), the information in § 63.6650(e); or</p>	<p>i. Semiannually according to the requirements in § 63.6650(b).</p>
		<p>c. If you had a malfunction during the reporting period, the information in § 63.6650(c)(4).</p>	<p>i. Semiannually according to the requirements in § 63.6650(b).</p>
<p>2. New or reconstructed non-emergency stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis</p>	<p>Report</p>	<p>a. The fuel flow rate of each fuel and the heating values that were used in your calculations, and you must demonstrate that the percentage of heat input provided by landfill gas or digester gas, is equivalent to 10 percent or more of the gross heat input on an annual basis; and</p>	<p>i. Annually, according to the requirements in § 63.6650.</p>
		<p>b. The operating limits provided in your federally enforceable permit, and any deviations from these limits; and</p>	<p>i. See item 2.a.i.</p>
		<p>c. Any problems or errors</p>	<p>i. See item 2.a.i.</p>

For each . . .	You must submit a . . .	The report must contain . . .	You must submit the report . . .
		suspected with the meters.	
3. Existing non-emergency, non-black start 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that operate more than 24 hours per calendar year	Compliance report	a. The results of the annual compliance demonstration, if conducted during the reporting period.	i. Semiannually according to the requirements in § 63.6650(b)(1)-(5).
4. Emergency stationary RICE that operate or are contractually obligated to be available for more than 15 hours per year for the purposes specified in § 63.6640(f)(2)(ii) and (iii) or that operate for the purposes specified in § 63.6640(f)(4)(ii)	Report	a. The information in § 63.6650(h)(1)	i. annually according to the requirements in § 63.6650(h)(2)-(3).

[78 FR 6719, Jan. 30, 2013]

**Table 8 to Subpart ZZZZ of Part 63—Applicability of General Provisions to Subpart ZZZZ.**

As stated in § 63.6665, you must comply with the following applicable general provisions.

General provisions citation	Subject of citation	Applies to subpart	Explanation
§ 63.1	General applicability of the General Provisions	Yes.	
§ 63.2	Definitions	Yes	Additional terms defined in § 63.6675.
§ 63.3	Units and abbreviations	Yes.	
§ 63.4	Prohibited activities and circumvention	Yes.	
§ 63.5	Construction and reconstruction	Yes.	
§ 63.6(a)	Applicability	Yes.	
§ 63.6(b)(1)-(4)	Compliance dates for new and reconstructed sources	Yes.	
§ 63.6(b)(5)	Notification	Yes.	
§ 63.6(b)(6)	[Reserved]		
§ 63.6(b)(7)	Compliance dates for new and reconstructed area sources that become major sources	Yes.	

<b>General provisions citation</b>	<b>Subject of citation</b>	<b>Applies to subpart</b>	<b>Explanation</b>
§ 63.6(c)(1)-(2)	Compliance dates for existing sources	Yes.	
§ 63.6(c)(3)-(4)	[Reserved]		
§ 63.6(c)(5)	Compliance dates for existing area sources that become major sources	Yes.	
§ 63.6(d)	[Reserved]		
§ 63.6(e)	Operation and maintenance	No.	
§ 63.6(f)(1)	Applicability of standards	No.	
§ 63.6(f)(2)	Methods for determining compliance	Yes.	
§ 63.6(f)(3)	Finding of compliance	Yes.	
§ 63.6(g)(1)-(3)	Use of alternate standard	Yes.	
§ 63.6(h)	Opacity and visible emission standards	No	Subpart ZZZZ does not contain opacity or visible emission standards.
§ 63.6(i)	Compliance extension procedures and criteria	Yes.	
§ 63.6(j)	Presidential compliance exemption	Yes.	
§ 63.7(a)(1)-(2)	Performance test dates	Yes	Subpart ZZZZ contains performance test dates at §§ 63.6610, 63.6611, and 63.6612.
§ 63.7(a)(3)	CAA section 114 authority	Yes.	
§ 63.7(b)(1)	Notification of performance test	Yes	Except that § 63.7(b)(1) only applies as specified in § 63.6645.
§ 63.7(b)(2)	Notification of rescheduling	Yes	Except that § 63.7(b)(2) only applies as specified in § 63.6645.
§ 63.7(c)	Quality assurance/test plan	Yes	Except that § 63.7(c) only applies as specified in § 63.6645.
§ 63.7(d)	Testing facilities	Yes.	
§ 63.7(e)(1)	Conditions for conducting performance tests	No.	Subpart ZZZZ specifies conditions for conducting performance tests at § 63.6620.
§ 63.7(e)(2)	Conduct of performance tests and reduction of data	Yes	Subpart ZZZZ specifies test methods at § 63.6620.
§ 63.7(e)(3)	Test run duration	Yes.	

General provisions citation	Subject of citation	Applies to subpart	Explanation
§ 63.7(e)(4)	Administrator may require other testing under section 114 of the CAA	Yes.	
§ 63.7(f)	Alternative test method provisions	Yes.	
§ 63.7(g)	Performance test data analysis, recordkeeping, and reporting	Yes.	
§ 63.7(h)	Waiver of tests	Yes.	
§ 63.8(a)(1)	Applicability of monitoring requirements	Yes	Subpart ZZZZ contains specific requirements for monitoring at § 63.6625.
§ 63.8(a)(2)	Performance specifications	Yes.	
§ 63.8(a)(3)	[Reserved]		
§ 63.8(a)(4)	Monitoring for control devices	No.	
§ 63.8(b)(1)	Monitoring	Yes.	
§ 63.8(b)(2)-(3)	Multiple effluents and multiple monitoring systems	Yes.	
§ 63.8(c)(1)	Monitoring system operation and maintenance	Yes.	
§ 63.8(c)(1)(i)	Routine and predictable SSM	No	
§ 63.8(c)(1)(ii)	SSM not in Startup Shutdown Malfunction Plan	Yes.	
§ 63.8(c)(1)(iii)	Compliance with operation and maintenance requirements	No	
§ 63.8(c)(2)-(3)	Monitoring system installation	Yes.	
§ 63.8(c)(4)	Continuous monitoring system (CMS) requirements	Yes	Except that subpart ZZZZ does not require Continuous Opacity Monitoring System (COMS).
§ 63.8(c)(5)	COMS minimum procedures	No	Subpart ZZZZ does not require COMS.
§ 63.8(c)(6)-(8)	CMS requirements	Yes	Except that subpart ZZZZ does not require COMS.
§ 63.8(d)	CMS quality control	Yes.	
§ 63.8(e)	CMS performance evaluation	Yes	Except for § 63.8(e)(5)(ii), which applies to COMS.
		Except that § 63.8(e) only applies as	

General provisions citation	Subject of citation	Applies to subpart	Explanation
		specified in § 63.6645.	
§ 63.8(f)(1)-(5)	Alternative monitoring method	Yes	Except that § 63.8(f)(4) only applies as specified in § 63.6645.
§ 63.8(f)(6)	Alternative to relative accuracy test	Yes	Except that § 63.8(f)(6) only applies as specified in § 63.6645.
§ 63.8(g)	Data reduction	Yes	Except that provisions for COMS are not applicable. Averaging periods for demonstrating compliance are specified at §§ 63.6635 and 63.6640.
§ 63.9(a)	Applicability and State delegation of notification requirements	Yes.	
§ 63.9(b)(1)-(5)	Initial notifications	Yes	Except that § 63.9(b)(3) is reserved.
		Except that § 63.9(b) only applies as specified in § 63.6645.	
§ 63.9(c)	Request for compliance extension	Yes	Except that § 63.9(c) only applies as specified in § 63.6645.
§ 63.9(d)	Notification of special compliance requirements for new sources	Yes	Except that § 63.9(d) only applies as specified in § 63.6645.
§ 63.9(e)	Notification of performance test	Yes	Except that § 63.9(e) only applies as specified in § 63.6645.
§ 63.9(f)	Notification of visible emission (VE)/opacity test	No	Subpart ZZZZ does not contain opacity or VE standards.
§ 63.9(g)(1)	Notification of performance evaluation	Yes	Except that § 63.9(g) only applies as specified in § 63.6645.
§ 63.9(g)(2)	Notification of use of COMS data	No	Subpart ZZZZ does not contain opacity or VE standards.
§ 63.9(g)(3)	Notification that criterion for alternative to RATA is exceeded	Yes	If alternative is in use.
		Except that § 63.9(g) only applies as specified in § 63.6645.	

General provisions citation	Subject of citation	Applies to subpart	Explanation
§ 63.9(h)(1)-(6)	Notification of compliance status	Yes	Except that notifications for sources using a CEMS are due 30 days after completion of performance evaluations. § 63.9(h)(4) is reserved.
			Except that § 63.9(h) only applies as specified in § 63.6645.
§ 63.9(i)	Adjustment of submittal deadlines	Yes.	
§ 63.9(j)	Change in previous information	Yes.	
§ 63.10(a)	Administrative provisions for recordkeeping/reporting	Yes.	
§ 63.10(b)(1)	Record retention	Yes	Except that the most recent 2 years of data do not have to be retained on site.
§ 63.10(b)(2)(i)-(v)	Records related to SSM	No.	
§ 63.10(b)(2)(vi)-(xi)	Records	Yes.	
§ 63.10(b)(2)(xii)	Record when under waiver	Yes.	
§ 63.10(b)(2)(xiii)	Records when using alternative to RATA	Yes	For CO standard if using RATA alternative.
§ 63.10(b)(2)(xiv)	Records of supporting documentation	Yes.	
§ 63.10(b)(3)	Records of applicability determination	Yes.	
§ 63.10(c)	Additional records for sources using CEMS	Yes	Except that § 63.10(c)(2)-(4) and (9) are reserved.
§ 63.10(d)(1)	General reporting requirements	Yes.	
§ 63.10(d)(2)	Report of performance test results	Yes.	
§ 63.10(d)(3)	Reporting opacity or VE observations	No	Subpart ZZZZ does not contain opacity or VE standards.
§ 63.10(d)(4)	Progress reports	Yes.	
§ 63.10(d)(5)	Startup, shutdown, and malfunction reports	No.	
§ 63.10(e)(1) and (2)(i)	Additional CMS Reports	Yes.	
§ 63.10(e)(2)(ii)	COMS-related report	No	Subpart ZZZZ does not require COMS.

General provisions citation	Subject of citation	Applies to subpart	Explanation
§ 63.10(e)(3)	Excess emission and parameter exceedances reports	Yes.	Except that § 63.10(e)(3)(i) (C) is reserved.
§ 63.10(e)(4)	Reporting COMS data	No	Subpart ZZZZ does not require COMS.
§ 63.10(f)	Waiver for recordkeeping/reporting	Yes.	
§ 63.11	Flares	No.	
§ 63.12	State authority and delegations	Yes.	
§ 63.13	Addresses	Yes.	
§ 63.14	Incorporation by reference	Yes.	
§ 63.15	Availability of information	Yes.	

[75 FR 9688, Mar. 3, 2010, as amended at 78 FR 6720, Jan. 30, 2013]

### Appendix A—Protocol for Using an Electrochemical Analyzer to Determine Oxygen and Carbon Monoxide Concentrations From Certain Engines

#### 1.0 SCOPE AND APPLICATION. WHAT IS THIS PROTOCOL?

This protocol is a procedure for using portable electrochemical (EC) cells for measuring carbon monoxide (CO) and oxygen (O<sub>2</sub>) concentrations in controlled and uncontrolled emissions from existing stationary 4-stroke lean burn and 4-stroke rich burn reciprocating internal combustion engines as specified in the applicable rule.

#### 1.1 Analytes. What does this protocol determine?

This protocol measures the engine exhaust gas concentrations of carbon monoxide (CO) and oxygen (O<sub>2</sub>).

Analyte	CAS No.	Sensitivity
Carbon monoxide (CO)	630-08-0	Minimum detectable limit should be 2 percent of the nominal range or 1 ppm, whichever is less restrictive.
Oxygen (O <sub>2</sub> )	7782-44-7	

#### 1.2 Applicability. When is this protocol acceptable?

This protocol is applicable to 40 CFR part 63, subpart ZZZZ. Because of inherent cross sensitivities of EC cells, you must not apply this protocol to other emissions sources without specific instruction to that effect.

#### 1.3 Data Quality Objectives. How good must my collected data be?

Refer to Section 13 to verify and document acceptable analyzer performance.

*1.4 Range. What is the targeted analytical range for this protocol?*

The measurement system and EC cell design(s) conforming to this protocol will determine the analytical range for each gas component. The nominal ranges are defined by choosing up-scale calibration gas concentrations near the maximum anticipated flue gas concentrations for CO and O<sub>2</sub>, or no more than twice the permitted CO level.

*1.5 Sensitivity. What minimum detectable limit will this protocol yield for a particular gas component?*

The minimum detectable limit depends on the nominal range and resolution of the specific EC cell used, and the signal to noise ratio of the measurement system. The minimum detectable limit should be 2 percent of the nominal range or 1 ppm, whichever is less restrictive.

## 2.0 SUMMARY OF PROTOCOL

In this protocol, a gas sample is extracted from an engine exhaust system and then conveyed to a portable EC analyzer for measurement of CO and O<sub>2</sub> gas concentrations. This method provides measurement system performance specifications and sampling protocols to ensure reliable data. You may use additions to, or modifications of vendor supplied measurement systems (e.g., heated or unheated sample lines, thermocouples, flow meters, selective gas scrubbers, etc.) to meet the design specifications of this protocol. Do not make changes to the measurement system from the as-verified configuration (Section 3.12).

## 3.0 DEFINITIONS

*3.1 Measurement System.* The total equipment required for the measurement of CO and O<sub>2</sub> concentrations. The measurement system consists of the following major subsystems:

*3.1.1 Data Recorder.* A strip chart recorder, computer or digital recorder for logging measurement data from the analyzer output. You may record measurement data from the digital data display manually or electronically.

*3.1.2 Electrochemical (EC) Cell.* A device, similar to a fuel cell, used to sense the presence of a specific analyte and generate an electrical current output proportional to the analyte concentration.

*3.1.3 Interference Gas Scrubber.* A device used to remove or neutralize chemical compounds that may interfere with the selective operation of an EC cell.

*3.1.4 Moisture Removal System.* Any device used to reduce the concentration of moisture in the sample stream so as to protect the EC cells from the damaging effects of condensation and to minimize errors in measurements caused by the scrubbing of soluble gases.

*3.1.5 Sample Interface.* The portion of the system used for one or more of the following: sample acquisition; sample transport; sample conditioning or protection of the EC cell from any degrading effects of the engine exhaust effluent; removal of particulate matter and condensed moisture.

*3.2 Nominal Range.* The range of analyte concentrations over which each EC cell is operated (normally 25 percent to 150 percent of up-scale calibration gas value). Several nominal ranges can be used for any given cell so long as the calibration and repeatability checks for that range remain within specifications.

*3.3 Calibration Gas.* A vendor certified concentration of a specific analyte in an appropriate balance gas.

*3.4 Zero Calibration Error.* The analyte concentration output exhibited by the EC cell in response to zero-level calibration gas.

*3.5 Up-Scale Calibration Error.* The mean of the difference between the analyte concentration exhibited by the EC cell and the certified concentration of the up-scale calibration gas.

*3.6 Interference Check.* A procedure for quantifying analytical interference from components in the engine exhaust gas other than the targeted analytes.

*3.7 Repeatability Check.* A protocol for demonstrating that an EC cell operated over a given nominal analyte concentration range provides a stable and consistent response and is not significantly affected by repeated exposure to that gas.

*3.8 Sample Flow Rate.* The flow rate of the gas sample as it passes through the EC cell. In some situations, EC cells can experience drift with changes in flow rate. The flow rate must be monitored and documented during all phases of a sampling run.

*3.9 Sampling Run.* A timed three-phase event whereby an EC cell's response rises and plateaus in a sample conditioning phase, remains relatively constant during a measurement data phase, then declines during a refresh phase. The sample conditioning phase exposes the EC cell to the gas sample for a length of time sufficient to reach a constant response. The measurement data phase is the time interval during which gas sample measurements can be made that meet the acceptance criteria of this protocol. The refresh phase then purges the EC cells with CO-free air. The refresh phase replenishes requisite O<sub>2</sub> and moisture in the electrolyte reserve and provides a mechanism to de-gas or desorb any interference gas scrubbers or filters so as to enable a stable CO EC cell response. There are four primary types of sampling runs: pre-sampling calibrations; stack gas sampling; post-sampling calibration checks; and measurement system repeatability checks. Stack gas sampling runs can be chained together for extended evaluations, providing all other procedural specifications are met.

*3.10 Sampling Day.* A time not to exceed twelve hours from the time of the pre-sampling calibration to the post-sampling calibration check. During this time, stack gas sampling runs can be repeated without repeated recalibrations, providing all other sampling specifications have been met.

*3.11 Pre-Sampling Calibration/Post-Sampling Calibration Check.* The protocols executed at the beginning and end of each sampling day to bracket measurement readings with controlled performance checks.

*3.12 Performance-Established Configuration.* The EC cell and sampling system configuration that existed at the time that it initially met the performance requirements of this protocol.

#### 4.0 INTERFERENCES.

When present in sufficient concentrations, NO and NO<sub>2</sub> are two gas species that have been reported to interfere with CO concentration measurements. In the likelihood of this occurrence, it is the protocol user's responsibility to employ and properly maintain an appropriate CO EC cell filter or scrubber for removal of these gases, as described in Section 6.2.12.

#### 5.0 SAFETY. [RESERVED]

#### 6.0 EQUIPMENT AND SUPPLIES.

*6.1 What equipment do I need for the measurement system?*

The system must maintain the gas sample at conditions that will prevent moisture condensation in the sample transport lines, both before and as the sample gas contacts the EC cells. The essential components of the measurement system are described below.

## 6.2 Measurement System Components.

**6.2.1 Sample Probe.** A single extraction-point probe constructed of glass, stainless steel or other non-reactive material, and of length sufficient to reach any designated sampling point. The sample probe must be designed to prevent plugging due to condensation or particulate matter.

**6.2.2 Sample Line.** Non-reactive tubing to transport the effluent from the sample probe to the EC cell.

**6.2.3 Calibration Assembly (optional).** A three-way valve assembly or equivalent to introduce calibration gases at ambient pressure at the exit end of the sample probe during calibration checks. The assembly must be designed such that only stack gas or calibration gas flows in the sample line and all gases flow through any gas path filters.

**6.2.4 Particulate Filter (optional).** Filters before the inlet of the EC cell to prevent accumulation of particulate material in the measurement system and extend the useful life of the components. All filters must be fabricated of materials that are non-reactive to the gas mixtures being sampled.

**6.2.5 Sample Pump.** A leak-free pump to provide undiluted sample gas to the system at a flow rate sufficient to minimize the response time of the measurement system. If located upstream of the EC cells, the pump must be constructed of a material that is non-reactive to the gas mixtures being sampled.

**6.2.8 Sample Flow Rate Monitoring.** An adjustable rotameter or equivalent device used to adjust and maintain the sample flow rate through the analyzer as prescribed.

**6.2.9 Sample Gas Manifold (optional).** A manifold to divert a portion of the sample gas stream to the analyzer and the remainder to a by-pass discharge vent. The sample gas manifold may also include provisions for introducing calibration gases directly to the analyzer. The manifold must be constructed of a material that is non-reactive to the gas mixtures being sampled.

**6.2.10 EC cell.** A device containing one or more EC cells to determine the CO and O<sub>2</sub> concentrations in the sample gas stream. The EC cell(s) must meet the applicable performance specifications of Section 13 of this protocol.

**6.2.11 Data Recorder.** A strip chart recorder, computer or digital recorder to make a record of analyzer output data. The data recorder resolution (i.e., readability) must be no greater than 1 ppm for CO; 0.1 percent for O<sub>2</sub>; and one degree (either °C or °F) for temperature. Alternatively, you may use a digital or analog meter having the same resolution to observe and manually record the analyzer responses.

**6.2.12 Interference Gas Filter or Scrubber.** A device to remove interfering compounds upstream of the CO EC cell. Specific interference gas filters or scrubbers used in the performance-established configuration of the analyzer must continue to be used. Such a filter or scrubber must have a means to determine when the removal agent is exhausted. Periodically replace or replenish it in accordance with the manufacturer's recommendations.

## 7.0 REAGENTS AND STANDARDS. WHAT CALIBRATION GASES ARE NEEDED?

**7.1 Calibration Gases.** CO calibration gases for the EC cell must be CO in nitrogen or CO in a mixture of nitrogen and O<sub>2</sub>. Use CO calibration gases with labeled concentration values certified by the manufacturer

to be within  $\pm 5$  percent of the label value. Dry ambient air (20.9 percent  $O_2$ ) is acceptable for calibration of the  $O_2$  cell. If needed, any lower percentage  $O_2$  calibration gas must be a mixture of  $O_2$  in nitrogen.

*7.1.1 Up-Scale CO Calibration Gas Concentration.* Choose one or more up-scale gas concentrations such that the average of the stack gas measurements for each stack gas sampling run are between 25 and 150 percent of those concentrations. Alternatively, choose an up-scale gas that does not exceed twice the concentration of the applicable outlet standard. If a measured gas value exceeds 150 percent of the up-scale CO calibration gas value at any time during the stack gas sampling run, the run must be discarded and repeated.

*7.1.2 Up-Scale  $O_2$  Calibration Gas Concentration.*

Select an  $O_2$  gas concentration such that the difference between the gas concentration and the average stack gas measurement or reading for each sample run is less than 15 percent  $O_2$ . When the average exhaust gas  $O_2$  readings are above 6 percent, you may use dry ambient air (20.9 percent  $O_2$ ) for the up-scale  $O_2$  calibration gas.

*7.1.3 Zero Gas.* Use an inert gas that contains less than 0.25 percent of the up-scale CO calibration gas concentration. You may use dry air that is free from ambient CO and other combustion gas products (e.g.,  $CO_2$ ).

## 8.0 SAMPLE COLLECTION AND ANALYSIS

*8.1 Selection of Sampling Sites.*

*8.1.1 Control Device Inlet.* Select a sampling site sufficiently downstream of the engine so that the combustion gases should be well mixed. Use a single sampling extraction point near the center of the duct (e.g., within the 10 percent centroidal area), unless instructed otherwise.

*8.1.2 Exhaust Gas Outlet.* Select a sampling site located at least two stack diameters downstream of any disturbance (e.g., turbocharger exhaust, crossover junction or recirculation take-off) and at least one-half stack diameter upstream of the gas discharge to the atmosphere. Use a single sampling extraction point near the center of the duct (e.g., within the 10 percent centroidal area), unless instructed otherwise.

*8.2 Stack Gas Collection and Analysis.* Prior to the first stack gas sampling run, conduct that the pre-sampling calibration in accordance with Section 10.1. Use Figure 1 to record all data. Zero the analyzer with zero gas. Confirm and record that the scrubber media color is correct and not exhausted. Then position the probe at the sampling point and begin the sampling run at the same flow rate used during the up-scale calibration. Record the start time. Record all EC cell output responses and the flow rate during the "sample conditioning phase" once per minute until constant readings are obtained. Then begin the "measurement data phase" and record readings every 15 seconds for at least two minutes (or eight readings), or as otherwise required to achieve two continuous minutes of data that meet the specification given in Section 13.1. Finally, perform the "refresh phase" by introducing dry air, free from CO and other combustion gases, until several minute-to-minute readings of consistent value have been obtained. For each run use the "measurement data phase" readings to calculate the average stack gas CO and  $O_2$  concentrations.

*8.3 EC Cell Rate.* Maintain the EC cell sample flow rate so that it does not vary by more than  $\pm 10$  percent throughout the pre-sampling calibration, stack gas sampling and post-sampling calibration check. Alternatively, the EC cell sample flow rate can be maintained within a tolerance range that does not affect the gas concentration readings by more than  $\pm 3$  percent, as instructed by the EC cell manufacturer.

## 9.0 QUALITY CONTROL (RESERVED)

## 10.0 CALIBRATION AND STANDARDIZATION

*10.1 Pre-Sampling Calibration.* Conduct the following protocol once for each nominal range to be used on each EC cell before performing a stack gas sampling run on each field sampling day. Repeat the calibration if you replace an EC cell before completing all of the sampling runs. There is no prescribed order for calibration of the EC cells; however, each cell must complete the measurement data phase during calibration. Assemble the measurement system by following the manufacturer's recommended protocols including for preparing and preconditioning the EC cell. Assure the measurement system has no leaks and verify the gas scrubbing agent is not depleted. Use Figure 1 to record all data.

*10.1.1 Zero Calibration.* For both the O<sub>2</sub> and CO cells, introduce zero gas to the measurement system (e.g., at the calibration assembly) and record the concentration reading every minute until readings are constant for at least two consecutive minutes. Include the time and sample flow rate. Repeat the steps in this section at least once to verify the zero calibration for each component gas.

*10.1.2 Zero Calibration Tolerance.* For each zero gas introduction, the zero level output must be less than or equal to  $\pm 3$  percent of the up-scale gas value or  $\pm 1$  ppm, whichever is less restrictive, for the CO channel and less than or equal to  $\pm 0.3$  percent O<sub>2</sub> for the O<sub>2</sub> channel.

*10.1.3 Up-Scale Calibration.* Individually introduce each calibration gas to the measurement system (e.g., at the calibration assembly) and record the start time. Record all EC cell output responses and the flow rate during this "sample conditioning phase" once per minute until readings are constant for at least two minutes. Then begin the "measurement data phase" and record readings every 15 seconds for a total of two minutes, or as otherwise required. Finally, perform the "refresh phase" by introducing dry air, free from CO and other combustion gases, until readings are constant for at least two consecutive minutes. Then repeat the steps in this section at least once to verify the calibration for each component gas. Introduce all gases to flow through the entire sample handling system (i.e., at the exit end of the sampling probe or the calibration assembly).

*10.1.4 Up-Scale Calibration Error.* The mean of the difference of the "measurement data phase" readings from the reported standard gas value must be less than or equal to  $\pm 5$  percent or  $\pm 1$  ppm for CO or  $\pm 0.5$  percent O<sub>2</sub>, whichever is less restrictive, respectively. The maximum allowable deviation from the mean measured value of any single "measurement data phase" reading must be less than or equal to  $\pm 2$  percent or  $\pm 1$  ppm for CO or  $\pm 0.5$  percent O<sub>2</sub>, whichever is less restrictive, respectively.

*10.2 Post-Sampling Calibration Check.* Conduct a stack gas post-sampling calibration check after the stack gas sampling run or set of runs and within 12 hours of the initial calibration. Conduct up-scale and zero calibration checks using the protocol in Section 10.1. Make no changes to the sampling system or EC cell calibration until all post-sampling calibration checks have been recorded. If either the zero or up-scale calibration error exceeds the respective specification in Sections 10.1.2 and 10.1.4 then all measurement data collected since the previous successful calibrations are invalid and re-calibration and re-sampling are required. If the sampling system is disassembled or the EC cell calibration is adjusted, repeat the calibration check before conducting the next analyzer sampling run.

## 11.0 ANALYTICAL PROCEDURE

The analytical procedure is fully discussed in Section 8.

## 12.0 CALCULATIONS AND DATA ANALYSIS

Determine the CO and O<sub>2</sub> concentrations for each stack gas sampling run by calculating the mean gas concentrations of the data recorded during the "measurement data phase".

## 13.0 PROTOCOL PERFORMANCE

Use the following protocols to verify consistent analyzer performance during each field sampling day.

*13.1 Measurement Data Phase Performance Check.* Calculate the mean of the readings from the “measurement data phase”. The maximum allowable deviation from the mean for each of the individual readings is  $\pm 2$  percent, or  $\pm 1$  ppm, whichever is less restrictive. Record the mean value and maximum deviation for each gas monitored. Data must conform to Section 10.1.4. The EC cell flow rate must conform to the specification in Section 8.3.

*Example: A measurement data phase is invalid if the maximum deviation of any single reading comprising that mean is greater than  $\pm 2$  percent or  $\pm 1$  ppm (the default criteria). For example, if the mean = 30 ppm, single readings of below 29 ppm and above 31 ppm are disallowed).*

*13.2 Interference Check.* Before the initial use of the EC cell and interference gas scrubber in the field, and semi-annually thereafter, challenge the interference gas scrubber with NO and NO<sub>2</sub> gas standards that are generally recognized as representative of diesel-fueled engine NO and NO<sub>2</sub> emission values. Record the responses displayed by the CO EC cell and other pertinent data on Figure 1 or a similar form.

*13.2.1 Interference Response.* The combined NO and NO<sub>2</sub> interference response should be less than or equal to  $\pm 5$  percent of the up-scale CO calibration gas concentration.

*13.3 Repeatability Check.* Conduct the following check once for each nominal range that is to be used on the CO EC cell within 5 days prior to each field sampling program. If a field sampling program lasts longer than 5 days, repeat this check every 5 days. Immediately repeat the check if the EC cell is replaced or if the EC cell is exposed to gas concentrations greater than 150 percent of the highest up-scale gas concentration.

*13.3.1 Repeatability Check Procedure.* Perform a complete EC cell sampling run (all three phases) by introducing the CO calibration gas to the measurement system and record the response. Follow Section 10.1.3. Use Figure 1 to record all data. Repeat the run three times for a total of four complete runs. During the four repeatability check runs, do not adjust the system except where necessary to achieve the correct calibration gas flow rate at the analyzer.

*13.3.2 Repeatability Check Calculations.* Determine the highest and lowest average “measurement data phase” CO concentrations from the four repeatability check runs and record the results on Figure 1 or a similar form. The absolute value of the difference between the maximum and minimum average values recorded must not vary more than  $\pm 3$  percent or  $\pm 1$  ppm of the up-scale gas value, whichever is less restrictive.

## 14.0 POLLUTION PREVENTION (RESERVED)

## 15.0 WASTE MANAGEMENT (RESERVED)

## 16.0 ALTERNATIVE PROCEDURES (RESERVED)

## 17.0 REFERENCES

(1) “Development of an Electrochemical Cell Emission Analyzer Test Protocol”, Topical Report, Phil Juneau, Emission Monitoring, Inc., July 1997.

(2) “Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Emissions from Natural Gas-Fired Engines, Boilers, and Process Heaters Using Portable Analyzers”, EMC Conditional Test Protocol 30 (CTM-30), Gas Research Institute Protocol GRI-96/0008, Revision 7, October 13, 1997.



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[78 FR 6721, Jan. 30, 2013]

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

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

<b>Source Background and Description</b>
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Source Name:	Amsted Rail Company, Inc.
Source Location:	4831 Hohman Avenue, Hammond, Indiana 46327
County:	Lake
SIC Code:	3493 (Steel Springs, Except Wire)
Permit Renewal No.:	089-33178-00204
Permit Reviewer:	Mehul Sura

On May 17, 2014, the Office of Air Quality (OAQ) had a notice published in The Post Tribune, Merrillville, Indiana, stating that Amsted Rail Company, Inc. had applied for a renewal of its Part 70 Operating Permit issued on February 20, 2009. The notice also stated that the OAQ proposed to issue this Part 70 Operating Permit Renewal and provided information on how the public could review the proposed Part 70 Operating Permit Renewal 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.

<b>Comments and Responses</b>
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On June 13, 2014, Amsted Rail Company, Inc. submitted comments to IDEM, OAQ on the draft Part 70 Operating Permit Renewal.

The Technical Support Document (TSD) is used by IDEM, OAQ for historical purposes. IDEM, OAQ does not make any changes to the original TSD, but the Permit will have the updated changes. The comments and revised permit language are provided below with deleted language as ~~strikeouts~~ and new language **bolded**.

Comment 1: This comment is itemized as follows:

- (a) The three grinders, identified as the Beasley Grinders, should actually be identified as "BESLY Grinders" as shown below. Please revise the description of these grinders.

Unit ID	Unit Description	Maximum Design Rate (tons springs ground per hour)	Year Constructed
3-0385	#1 <del>Beasley</del> <b>BESLY</b> Ferris Wheel Grinder	1.55	1978
3-0386	#2 <del>Beasley</del> <b>BESLY</b> Ferris Wheel Grinder	1.11	1978
3-0394	<del>Beasley</del> <b>BESLY</b> Swing Grinder	0.35	1998

- (b) The oil quench tanks 3-2821, 3-4000, 3-2845 and 3-2838A are venting inside. Please revise the description of these oil quench tanks.
- (c) The paint spray booths 3-2715 and 3-2714 are exhausting to Stacks 30 and 31, respectively. Please revise the description of these paint spray booths.
- (d) The shot peeners 3-1804, 3-1821, 3-1823, 3-1824, 3-1825 and 3-1826 are no

longer vented outside. These shot peeners are now venting inside. Please revise the description of these shot peeners to reflect it in the permit. Since the Visible emission notations cannot be conducted indoors; the requirement to perform visible emission notations, and the associated record keeping requirements, for these shot peeners should also be removed from the permit.

- (e) Please add the following new insignificant activity in the permit.

Unit ID	Unit Description	Maximum Design Capacity (MMBtu/Hr heat input)
2-5007	Small Line Slot Furnace	1.5

- (f) Please remove the following insignificant activity from the permit.

Unit ID	Unit Description	Maximum Design Capacity (MMBtu/Hr heat input)
2-5203B	Line 4 Bar Furnace	6.5

- (g) Please remove the two Vertical Opposing Disc Grinders 3-0396 and 3-0397 from the permit because these units are no longer at the facility. Please also remove the permit conditions associated with these grinders.

Response 1: The changes have been made in the permit as follows for the above comments.

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

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...

- (b) Ten (10) Coil Spring Grinders, which include the following:

Unit ID	Unit Description	Maximum Design Rate (tons springs ground per hour)	Year Constructed
3-0244	#1 Mattson (Large) Grinder	2.15	1989
3-0247	Torrington Ferris Wheel Grinder	0.91	1942
3-0249	Gardner Paddle Wheel Grinder	0.15	1947
3-0385	#1 <del>Beasley</del> BESLY Ferris Wheel Grinder	1.55	1978
3-0386	#2 <del>Beasley</del> BESLY Ferris Wheel Grinder	1.11	1978
3-0389	Gardner Tub Grinder	0.55	1980
3-0393	#2 Mattson (Small) Grinder	2.15	1989
3-0394	<del>Beasley</del> BESLY Swing Grinder	0.35	1998
3-0396	<del>Vertical Opposing Disc Grinder</del>	1.11	Prior to 1994
3-0397	<del>Vertical Opposing Disc Grinder</del>	1.55	Prior to 1994

All the coil spring grinders above are controlled using a pulse-jet baghouse, identified as 3-3037, exhausting to Stack 3.

- (c) Four (4) Coil Spring Manufacturing Process Lines, which include the following:

- (1) . . .
  - (i) One (1) oil quench tank, identified as 3-2821, constructed in 1973, using an oil smoke filter, to control particulate emissions (oil mists) generated during the quenching operation, and **venting inside**~~exhausting to Stack 13.~~
  - . . .
- (2) . . .
  - (i) One (1) oil quench tank, identified as 3-2838A, constructed in 2011, using an oil smoke filter, identified as 3-3027A, to control particulate emissions (oil mists) generated during the quenching operation, and **venting inside**~~exhausting to Stack 14.~~
  - . . .
- (3) . . .
  - (i) One (1) oil quench tank, identified as 3-2845, constructed in 1959, using an oil smoke filter, identified as 3-3036, to control particulate emissions (oil mists) generated during the quenching operation, and **venting inside**~~exhausting to Stack 15.~~
  - . . .
- (4) . . .
  - (i) One (1) oil quench tank, identified as 3-4000, constructed in 2012, using an oil smoke filter, identified as 3-4001, to control particulate emissions (oil mists) generated during the quenching operation, and **venting inside**~~exhausting to Stack 14.~~
  - . . .
- (d) Two (2) Paint Spray Booths, which include the following:
  - (1) Paint Spray Booth, identified as 3-2714, constructed in 1980, with a maximum capacity of 0.102 gallons of coating per hour, coating steel coil springs, using High Volume Low Pressure (HVLP) Spray Application method and dry filters - double wall as PM control, and **exhausting to Stack 30**~~venting inside.~~
  - (2) Paint Spray Booth, identified as 3-2715, constructed in 1989, with a maximum capacity of 0.061 gallons of coating per hour, coating steel coil springs, using High Volume Low Pressure (HVLP) Spray Application method and using dry filters - double wall as PM control, and **exhausting to Stack 31**~~venting inside.~~
- (e) . . .
- (f) Six (6) Shot Peeners, which include the following units:
  - (1) Pangborn Shot Peener, identified as 3-1804, with a maximum capacity of 0.012 tons steel shots used per hour, using a baghouse, identified as 3-3017, as control, constructed in 1964, and **venting inside**~~exhausting to Stack 9.~~

- (2) Wheelabrator Shot Peener, identified as 3-1821, with a maximum capacity of 0.12 tons steel shots used per hour, using a baghouse, identified as 3-3022, as control, constructed in 1972, and **venting inside**~~exhausting to Stack 14.~~
- (3) Wheelabrator Shot Peener, identified as 3-1823, with a maximum capacity of 0.21 tons steel shots used per hour, using a baghouse, identified as 3-1823, as control, constructed in 1980, and **venting inside**~~exhausting to Stack 12.~~
- (4) One (1) Shot Peener, identified as 3-1824, constructed in 2011, with a maximum capacity of 5.15 tons steel parts used per hour, using a baghouse, identified as 3-3024, for control of particulate matter emissions, and **venting inside**~~exhausting to Stack 24.~~
- (5) One (1) Shot Peener, identified as 3-1825, constructed in 2011, with a maximum capacity of 5.15 tons steel parts used per hour, using a baghouse, identified as 3-3025, for control of particulate matter emissions, and **venting inside**~~exhausting to Stack 25.~~
- (6) One (1) Shot Peener, identified as 3-1826, constructed in 2012, with a maximum capacity of 5.25 tons of steel parts per hour, using a baghouse, identified as 3-1826A, for particulate matter control, and **venting inside**~~exhausting to Stack 26.~~

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

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

- (a) Space heaters, process heaters, heat treat furnaces or boilers using natural gas-fired combustion sources, regulated by 326 IAC 6.8-2-4(b), with heat input equal to or less than ten million (10,000,000) British thermal units per hour, which include the following units:

Unit ID	Unit Description	Maximum Design Capacity (MMBtu/hr heat input)
2-5006	Small Line Slot Furnace	1.5
<b>2-5007</b>	<b>Small Line Slot Furnace</b>	<b>1.5</b>
2-5014	Medium Line Slot Furnace	5.2
2-5015	Medium Line Slot Furnace	(for Units 2-5014 and 2-5015 combined)
2-5036	Large Line Slot Furnace	2.5
2-5085	Small Line Bar Furnace	8.0
2-5201	Line 4 Slot Furnace	1.25
2-5202	Line 4 Slot Furnace	1.25
2-5203A	Line 4 Bar Furnace	6.5
<del>2-5203B</del>	<del>Line 4 Bar Furnace</del>	<del>6.5</del>

...

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

**Emissions Unit Description:** Coil Spring Grinders

- (a) ...

(b) Ten (10) Coil Spring Grinders, which include the following:

Unit ID	Unit Description	Maximum Design Rate (tons springs ground per hour)	Year Constructed
3-0244	#1 Mattson (Large) Grinder	2.15	1989
3-0247	Torrington Ferris Wheel Grinder	0.91	1942
3-0249	Gardner Paddle Wheel Grinder	0.15	1947
3-0385	#1 <del>Beasley</del> <b>BESLY</b> Ferris Wheel Grinder	1.55	1978
3-0386	#2 <del>Beasley</del> <b>BESLY</b> Ferris Wheel Grinder	1.11	1978
3-0389	Gardner Tub Grinder	0.55	1980
3-0393	#2 Mattson (Small) Grinder	2.15	1989
3-0394	<del>Beasley</del> <b>BESLY</b> Swing Grinder	0.35	1998
<del>3-0396</del>	<del>Vertical Opposing Disc Grinder</del>	<del>1.11</del>	<del>Prior to 1994</del>
<del>3-0397</del>	<del>Vertical Opposing Disc Grinder</del>	<del>1.55</del>	<del>Prior to 1994</del>

All the coil spring grinders above are controlled using a pulse-jet baghouse, identified as 3-3037, exhausting to Stack 3.

Insignificant Activities

(a) Space heaters, process heaters, heat treat furnaces or boilers using natural gas-fired combustion sources, regulated by 326 IAC 6.8-2-4(b), with heat input equal to or less than ten million (10,000,000) British thermal units per hour, which include the following units:

Unit ID	Unit Description	Maximum Design Capacity (MMBtu/hr heat input)
2-5006	Small Line Slot Furnace	1.5
<b>2-5007</b>	<b>Small Line Slot Furnace</b>	<b>1.5</b>
2-5014	Medium Line Slot Furnace	5.2 (for Units 2-5014 and 2-5015 combined)
2-5015	Medium Line Slot Furnace	
2-5036	Large Line Slot Furnace	2.5
2-5085	Small Line Bar Furnace	8.0
2-5201	Line 4 Slot Furnace	1.25
2-5202	Line 4 Slot Furnace	1.25
2-5203A	Line 4 Bar Furnace	6.5
<del>2-5203B</del>	<del>Line 4 Bar Furnace</del>	<del>6.5</del>

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

D.1.1 Particulate Matter Limitations for Lake County [326 IAC 6.8]

(a) Pursuant to 326 IAC 6.8-1-2, the PM emissions after control from the facilities listed below shall not exceed the limits as specified below.

Emission Unit	ID	Emission Limit (grains/dscf)
<del>Vertical Opposing Disc Grinder</del>	<del>3-0396</del>	<del>0.03</del>
<del>Vertical Opposing Disc Grinder</del>	<del>3-0397</del>	<del>0.03</del>

- (b) Pursuant to 326 IAC 6.8-1-2, the PM emissions after control from the quench oil heaters (2-5204A and 2-5204 B) shall not exceed 0.03 grains/dscf.

**D.1.2 Particulate Matter less than 10 microns in diameter (PM10) [326 IAC 6.8-2-4]**

- (a) Pursuant to 326 IAC 6.8-2-4(a) (Lake County PM10 Emission Requirements), PM10 emissions after control from the facilities listed below shall not exceed the limit as specified below.

Process served by Stack 3	Unit ID	PM10 Emission Limit (lb/hr)
#1 Mattison (Large) Grinder	3-0244	2.085
Torrington Ferris Wheel Grinder	3-0247	
Gardner Paddle Wheel Grinder	3-0249	
#1 <del>Besley</del> BESLY Ferris Wheel	3-0385	
#2 <del>Besley</del> BESLY Ferris Wheel	3-0386	
Gardner Tub Grinder	3-0389	
#2 Mattison (Small) Grinder	3-0393	
<del>Besley</del> BESLY Swing Grinder	3-0394	

- (b) Pursuant to 326 IAC 6.8-2-4(b) (Lake County: PM10 Emission Requirements), the furnaces listed in this section shall fire natural gas only.

**D.1.3 PSD Minor Limits [326 IAC 2-2]**

In order to render the requirements of 326 IAC 2-2 not applicable, the Permittee shall comply with the following:

Emission Unit	ID	PM Limit (lb/hr)	PM10 Limit (lb/hr)	PM2.5 Limit (lb/hr)	
#1 Mattison (Large) Grinder	3-0244	0.99	2.085	0.99	
Torrington Ferris Wheel Grinder	3-0247				
Gardner Paddle Wheel Grinder	3-0249				
#1 <del>Besley</del> BESLY Ferris Wheel	3-0385				
#2 <del>Besley</del> BESLY Ferris Wheel	3-0386				
Gardner Tub Grinder	3-0389				
#2 Mattison (Small) Grinder	3-0393				
<del>Besley</del> BESLY Swing Grinder	3-0394				
<del>Vertical Opposing Disc Grinder</del>	<del>3-0396</del>				1.89
<del>Vertical Opposing Disc Grinder</del>	<del>3-0397</del>				2.64

...

**D.1.4 Preventive Maintenance Plan [326 IAC 2-7-5(12)]**

A Preventive Maintenance Plan (PMP) is required for the facilities listed below and its control device (baghouse 3-3037). Section B - Preventive Maintenance Plan contains the Permittee's obligations with regard to the preventive maintenance plan required by this condition.

Unit ID	Unit Description
3-0244	#1 Mattison (Large) Grinder
3-0247	Torrington Ferris Wheel Grinder

3-0249	Gardner Paddle Wheel Grinder
3-0385	#1 <del>Beasley</del> <b>BESLY</b> Ferris Wheel Grinder
3-0386	#2 <del>Beasley</del> <b>BESLY</b> Ferris Wheel Grinder
3-0389	Gardner Tub Grinder
3-0393	#2 Mattson (Small) Grinder
3-0394	<del>Beasley</del> <b>BESLY</b> Swing Grinder
<del>3-0396</del>	<del>Vertical Opposing Disc Grinder</del>
<del>3-0397</del>	<del>Vertical Opposing Disc Grinder</del>

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

**D.1.5 Particulate Control**

- (a) In order to comply with Conditions ~~D.1.4(a)~~, D.1.2(a) and D.1.3, the baghouse (3-3037) for PM, PM10, and PM2.5 control shall be in operation and control emissions at all times when one or more of the associated grinders to this baghouse is in operation.

...

**D.1.7 Testing Requirements [326 IAC 2-1.1-11]**

- ~~(a) In order to demonstrate compliance with Condition D.1.1(a), the Permittee shall perform PM testing of the baghouse (3-3037) controlling the grinders listed below no later than 5 years after the most recent testing.~~

<b>Emission Unit</b>	<b>ID</b>
<del>Vertical Opposing Disc Grinder</del>	<del>3-0396</del>
<del>Vertical Opposing Disc Grinder</del>	<del>3-0397</del>

~~This testing shall be conducted utilizing methods as approved by the Commissioner. This testing shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration.~~

- (ba) In order to demonstrate compliance with Condition D.1.2(a), the Permittee shall perform PM10 testing of the baghouse (3-3037) controlling the grinders listed below no later than 5 years after the most recent testing.

<b>Emission Unit</b>	<b>ID</b>
#1 Mattison (Large) Grinder	3-0244
Torrington Ferris Wheel Grinder	3-0247
Gardner Paddle Wheel Grinder	3-0249
#1 <del>Besley</del> <b>BESLY</b> Ferris Wheel	3-0385
#2 <del>Besley</del> <b>BESLY</b> Ferris Wheel	3-0386
Gardner Tub Grinder	3-0389
#2 Mattison (Small) Grinder	3-0393
<del>Besley</del> <b>BESLY</b> Swing Grinder	3-0394

This testing shall be conducted utilizing methods as approved by the Commissioner. This testing shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration.

PM10 includes filterable and condensable PM.

- (eb) In order to demonstrate compliance with Condition D.1.3, the Permittee shall perform PM and PM2.5 testing of the baghouse (3-3037) controlling the grinders listed below no later than 5 years after the most recent testing.

Emission Unit	ID
#1 Mattison (Large) Grinder	3-0244
Torrington Ferris Wheel Grinder	3-0247
Gardner Paddle Wheel Grinder	3-0249
#1 <del>Besley</del> <b>BESLY</b> Ferris Wheel	3-0385
#2 <del>Besley</del> <b>BESLY</b> Ferris Wheel	3-0386
Gardner Tub Grinder	3-0389
#2 Mattison (Small) Grinder	3-0393
<del>Besley</del> <b>BESLY</b> Swing Grinder	3-0394
<del>Vertical Opposing Disc Grinder</del>	<del>3-0396</del>
<del>Vertical Opposing Disc Grinder</del>	<del>3-0397</del>

This testing shall be conducted utilizing methods as approved by the Commissioner. This testing shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration.

PM2.5 includes filterable and condensable PM.

- (dc) . . .

The Permittee has an option to comply with the testing requirements specified in paragraphs (a) ~~through~~ and (eb) above, concurrently through one compliance test for the baghouse (3-3037).

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

**D.1.8 Visible Emissions Notations [40 CFR 64]**

- (a) Visible emission notations of the baghouse (3-3037) stack exhaust shall be performed at least once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

. . .

The above monitoring conditions also are required under 40 CFR 64 for ~~Grinder Shot Peeners 3-1824, 3-1825 and 3-1826~~ **3-0244, 3-0385 and 3-0393** (for PM, ~~PM10 and~~ PM2.5).

. . .

### SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

#### Emissions Unit Description: Spray Booths

- (d) Two (2) Paint Spray Booths, which include the following:
- (1) Paint Spray Booth, identified as 3-2714, constructed in 1980, with a maximum capacity of 0.102 gallons of coating per hour, coating steel coil springs, using High Volume Low Pressure (HVLP) Spray Application method and dry filters - double wall as PM control, and **exhausting to Stack 30**~~venting inside~~.
  - (2) Paint Spray Booth, identified as 3-2715, constructed in 1989, with a maximum capacity of 0.061 gallons of coating per hour, coating steel coil springs, using High Volume Low Pressure (HVLP) Spray Application method and using dry filters - double wall as PM control, and **exhausting to Stack 31**~~venting inside~~.

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

### SECTION D.5 EMISSIONS UNIT OPERATION CONDITIONS

#### Emissions Unit Description: Shot Peeners

- (f) Six (6) Shot Peeners, which include the following units:
- (1) Pangborn Shot Peener, identified as 3-1804, with a maximum capacity of 0.012 tons steel shots used per hour, using a baghouse, identified as 3-3017, as control, constructed in 1964, and **venting inside**~~exhausting to Stack 9~~.
  - (2) Wheelabrator Shot Peener, identified as 3-1821, with a maximum capacity of 0.12 tons steel shots used per hour, using a baghouse, identified as 3-3022, as control, constructed in 1972, and **venting inside**~~exhausting to Stack 11~~.
  - (3) Wheelabrator Shot Peener, identified as 3-1823, with a maximum capacity of 0.21 tons steel shots used per hour, using a baghouse, identified as 3-1823, as control, constructed in 1980, and exhausting to Stack 12.
  - (4) One (1) Shot Peener, identified as 3-1824, constructed in 2011, with a maximum capacity of 5.15 tons steel parts used per hour, using a baghouse, identified as 3-3024, for control of particulate matter emissions, and **venting inside**~~exhausting to Stack 24~~.
  - (5) One (1) Shot Peener, identified as 3-1825, constructed in 2011, with a maximum capacity of 5.15 tons steel parts used per hour, using a baghouse, identified as 3-3025, for control of particulate matter emissions, and **venting inside**~~exhausting to Stack 25~~.
  - (6) One (1) Shot Peener, identified as 3-1826, constructed in 2012, with a maximum capacity of 5.25 tons of steel parts per hour, using a baghouse, identified as 3-1826A, for particulate matter control, and **venting inside**~~exhausting to Stack 26~~.

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

...

- ~~(a) Visible emission notations of the stack exhausts for Shot Peeners 3-1804, 3-1821, 3-1823, 3-1824, 3-1825 and 3-1826 shall be performed at least once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.~~
- ~~(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.~~
- ~~(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.~~
- ~~(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.~~
- ~~(e) If abnormal emissions are observed, the Permittee shall take reasonable response steps. Observation of abnormal emissions that do not violate an applicable opacity limit is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit. Section C – Response to Excursions and Exceedances contains the Permittee's obligations with regard to the reasonable response steps required by this condition.~~

The above monitoring conditions are also required under 40 CFR 64, Compliance Assurance Monitoring (CAM) for Shot Peeners 3-1824, 3-1825 and 3-1826 (for PM, PM10 and PM2.5)

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

#### **D.5.8 Record Keeping Requirements**

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- ~~(a) To document the compliance status with Condition D.5.7, the Permittee shall maintain daily records of visible emission notations of the baghouse stack exhausts of Shot Peeners 3-1804, 3-1821, 3-1823, 3-1824, 3-1825 and 3-1826. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).~~
- ~~(b) Section C – General Record Keeping Requirements contains the Permittee's obligations with regard to the record keeping required by this condition.~~

Comment 2: Condition D.1.8 requires visible emission notations for the grinding operations and associated baghouse but the last sentence of this condition refers to the shot peeners. Amsted Rail Company, Inc. believes that this sentence was included in error and should be removed from the condition.

Response 2: The last sentence Condition D.1.8 has been revised to remove the reference to the shot peeners. The reference to Grinders 3-0244, 3-0385 and 3-0393 has been added in this sentence because these grinders are subject to CAM for PM (for details, please refer CAM determination under 'Federal Rule Applicability' section of this TSD).

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

#### **D.1.8 Visible Emissions Notations [40 CFR 64]**

---

- (a) Visible emission notations of the baghouse (3-3037) stack exhaust shall be performed at least once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

...

The above monitoring conditions also are required under 40 CFR 64 for **GrindersShot Peeners 3-1824, 3-1825 and 3-18263-0244, 3-0385 and 3-0393** (for PM, PM10 and PM2.5).

Comment 3: Conditions D.3.5(a)(2) and D.4.3(a)(2) require the Permittee to maintain records of the coating and solvent usage on a daily basis when compliant coatings are used. The requirement for daily records is necessary when using a daily volume weighted average option for non-compliant coatings; however, this requirement is not warranted when compliant coatings are used since compliance with the VOC usage limit is demonstrated by the technical data sheet and product specifications for the coatings. Amsted Rail Company, Inc. requests that this requirement be removed.

Response 3: The coating material and solvent usage are the required parameters to determine the 'as-applied coating' rate. The coating material and solvent usage record keeping requirement was included in the permit to ensure that these parameters are documented. No change has been made to coating material and solvent usage record keeping requirement.

Upon further evaluation, IDEM has decided to add daily cleanup solvent and total VOC usage record keeping requirements because these parameters are also required to calculate the 'as-applied coating' rate.

#### D.3.5 Record Keeping Requirements

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(a) For compliant coating option  
To document compliance with Conditions D.3.1(a), the Permittee shall maintain records in accordance with (1) ~~and~~**through (24)** below when compliant coating is used. Records maintained for (1) ~~and~~**through (24)** shall be taken as stated below and shall be complete and sufficient to establish compliance with the VOC usage limit established in Conditions D.3.1(a).

...

**(3) The daily cleanup solvent usage; and**

**(4) The total VOC usage for each day.**

(b) For daily volume weighted average option  
To document compliance with Conditions D.3.1(a), the Permittee shall maintain records in accordance with (1) ~~through~~**and (5)** below when Daily volume weighted average option is used. Records maintained for (1) ~~through~~**and (5)** shall be taken as stated below and shall be complete and sufficient to establish compliance with the VOC usage limit established in Conditions D.3.1(a).

...

...

#### D.4.3 Record Keeping Requirements

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(a) When compliant coating option is used  
To document compliance with Conditions D.4.1(a), the Permittee shall maintain records in accordance with (1) ~~and~~**through (24)** below when compliant coating is used. Records maintained for (1) ~~and~~**through (24)** shall be taken as stated below and shall be complete and sufficient to establish compliance with the VOC usage limit established in Conditions ~~D.3.1~~**D.4.1**(a).

...

**(3) The daily cleanup solvent usage; and**

**(4) The total VOC usage for each day.**

**(ab) When daily volume weighted average option is used**

To document compliance with Conditions D.4.1(a), the Permittee shall maintain records in accordance with (1) ~~through~~ and (5) below when Daily volume weighted average option is used. Records maintained for (1) ~~through~~ and (5) shall be taken as stated below and shall be complete and sufficient to establish compliance with the VOC usage limit established in Conditions D.4.1(a).

...

...

Comment 4: Conditions D.1.4 and D.2.4 require Preventive Maintenance Plans for the emission units, including grinders and quench tanks, and their associated control devices. Preventive maintenance plans are not warranted for the emission units since maintenance on these units would not affect emissions. Amsted Rail Company, Inc. agrees that preventive maintenance for the control devices is necessary in order to ensure performance; however, there would not be any preventive measures that could be taken to change emissions on a grinder or a quench tank. Therefore, Amsted Rail Company, Inc. requests that IDEM revise Conditions D.1.4 and D.2.4 to require Preventive Maintenance Plans for the control devices only.

Response 4: The Preventive Maintenance Plan requirement must be included in every applicable Title V permit pursuant to 326 IAC 2-7-5(13). This rule refers back to the Preventive Maintenance Plan requirement as described in 326 IAC 1-6-3. This Preventive Maintenance Plan rule sets out the requirements for:

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

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

In addition to preventive maintenance performed on the control devices, preventive maintenance should also be performed on the emission units because lack of proper maintenance on the emission units can result in increased emissions. Therefore, no change has been made due to this comment.

Comment 5: Amsted Rail Company, Inc. request that the Fugitive Dust Plan be removed from the permit and incorporated by reference. The plan includes facility contact information which could change on a frequent basis. For example, the plan that is included in the draft permit was updated in March 2014 but the telephone extension for the Operations Manager has changed and the title for the Maintenance Manager has changed. Amsted

Rail Company, Inc. does not want to be required to update the permit when such changes occur to the Fugitive Dust Plan and therefore, Amsted Rail Company, Inc. requests that the permit incorporate the plan by reference such that the permit would not include an out-of-date document.

Response 5: Pursuant to 326 IAC 6.8-10-4(2), the fugitive dust control plan (FDCP) is part of the permit condition C.5 - Fugitive Particulate Matter Emissions; therefore, the FDCP cannot be removed from the permit or included in the permit through reference only. No change has been made due to this comment.

<b>Additional Changes</b>
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IDEM, OAQ has decided to make additional revisions to the permit as described below.

In order to minimize future revisions to permit attachments, IDEM will not include the company name, source address and permit writer name on federal rule attachments to a permit. Therefore, the following attachments have been revised to reflect this change:

- (a) Attachment B – 40 CFR 63, NESHAP, Subpart CCCCCC
- (b) Attachment C – 40 CFR 63, NESHAP, Subpart ZZZZ

**Potential to Emit After Issuance**

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

<b>Potential To Emit of the Entire Source After Issuance of Renewal (tons/year)</b>									
<b>Process</b>	<b>Emission Unit ID</b>	<b>PM</b>	<b>PM10</b>	<b>PM2.5</b>	<b>SO2</b>	<b>NOx</b>	<b>VOC</b>	<b>CO</b>	<b>CO2e</b>
Grinders	3-0244	67.76 <sup>(a)</sup>	9.13 <sup>(a)</sup>	4.34 <sup>(a)</sup>	-	-	-	-	-
	3-0247				-	-	-	-	-
	3-0249				-	-	-	-	-
	3-0385				-	-	-	-	-
	3-0386				-	-	-	-	-
	3-0389				-	-	-	-	-
	3-0393				-	-	-	-	-
	3-0394				-	-	-	-	-
	3-0396				-	-	-	-	-
3-0397	-	-	-	-	-				
Quench Tanks	3-2821	13.01 <sup>(a)</sup>	4.60 <sup>(a)</sup>	4.60 <sup>(a)</sup>	-	-	3.07	-	-
	3-2838A	13.01 <sup>(a)</sup>	13.01 <sup>(a)</sup>	13.01 <sup>(a)</sup>	-	-	3.07	-	-
	3-2845	13.01 <sup>(a)</sup>	7.67 <sup>(a)</sup>	7.67 <sup>(a)</sup>	-	-	3.07	-	-
	3-4000	13.53 <sup>(a)</sup>	13.53 <sup>(a)</sup>	13.53 <sup>(a)</sup>	-	-	3.07	-	-
Paint Booths and Dip Tanks	3-2714	0.35	0.35	0.35	-	-	0.75	-	-
	3-2715	0.59	0.59	0.59	-	-	1.25	-	-
	3-2813	-	-	-	-	-	13.26	-	-
	3-2865	-	-	-	-	-	13.26	-	-
	3-2865A	-	-	-	-	-	13.26	-	-
	3-2867	-	-	-	-	-	13.26	-	-
	3-2870	-	-	-	-	-	13.26	-	-
	3-2874A	-	-	-	-	-	13.26	-	-
	3-2874B	-	-	-	-	-	13.26	-	-
	3-2869	-	-	-	-	-	9.78	-	-
	3-2872	-	-	-	-	-	9.78	-	-
3-2873	-	-	-	-	-	9.78	-	-	
Shot Peelers	3-1804	4.34 <sup>(a)</sup>	0.26 <sup>(a)</sup>	0.26 <sup>(a)</sup>	-	-	-	-	-
	3-1821	4.34 <sup>(a)</sup>	0.26 <sup>(a)</sup>	0.26 <sup>(a)</sup>	-	-	-	-	-
	3-1823	4.34 <sup>(a)</sup>	0.26 <sup>(a)</sup>	0.26 <sup>(a)</sup>	-	-	-	-	-
	3-1824	4.34 <sup>(a)</sup>	4.34 <sup>(a)</sup>	0.26 <sup>(a)</sup>	-	-	-	-	-
	3-1825	4.34 <sup>(a)</sup>	4.34 <sup>(a)</sup>	0.26 <sup>(a)</sup>	-	-	-	-	-
	3-1826	4.51 <sup>(a)</sup>	4.51 <sup>(a)</sup>	0.26 <sup>(a)</sup>	-	-	-	-	-
NG Combustion		0.79 <b>0.74</b>	3.14 <b>2.98</b>	3.14 <b>2.98</b>	0.25 <b>0.24</b>	41.35 <b>39.21</b>	2.27 <b>2.16</b>	34.74 <b>32.93</b>	52,558.73 <b>49966.95</b>
Degreasers		-	-	-	-	-	3.52	-	-
Fire pump engine		1.25	1.25	1.25	1.17	17.65	1.43	3.80	656.93
<b>Total PTE of Entire Source</b>		<b>149.49</b> <b>149.45</b>	<b>87.06</b> <b>67.08</b>	<b>50.05</b> <b>49.89</b>	<b>1.42</b> <b>1.40</b>	<b>59.00</b> <b>56.86</b>	<b>143.61</b> <b>143.50</b>	<b>38.54</b> <b>36.74</b>	<b>53,215.67</b> <b>50623.89</b>
<b>Title V Major Source Thresholds</b>		<b>NA</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100,000</b>
<b>PSD Major Source Thresholds</b>		<b>250</b>	<b>250</b>	<b>250</b>	<b>250</b>	<b>250</b>	<b>--</b>	<b>250</b>	<b>100,000</b>
<b>Emission Offset Major Source Thresholds</b>		<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>100</b>	<b>100</b>	<b>NA</b>	<b>NA</b>

<sup>(a)</sup> The PTE is based on PSD Minor limits (for details, please refer 326 IAC 2-2 applicability in ' State Rule Applicability - Entire Source ' section of this TSD).

(Note: the table below was generated from the above table, with bold text un-bolded and strikethrough text deleted)

Process	Potential To Emit of the Entire Source After Issuance of Renewal (tons/year)								
	Emission Unit ID	PM	PM10	PM2.5	SO2	NOx	VOC	CO	CO2e
Grinders	3-0244	67.76 <sup>(a)</sup>	9.13 <sup>(a)</sup>	4.34 <sup>(a)</sup>	-	-	-	-	-
	3-0247				-	-	-	-	-
	3-0249				-	-	-	-	-
	3-0385				-	-	-	-	-
	3-0386				-	-	-	-	-
	3-0389				-	-	-	-	-
	3-0393				-	-	-	-	-
	3-0394				-	-	-	-	-
	3-0397				-	-	-	-	-
Quench Tanks	3-2821	13.01 <sup>(a)</sup>	4.60 <sup>(a)</sup>	4.60 <sup>(a)</sup>	-	-	3.07	-	-
	3-2838A	13.01 <sup>(a)</sup>	13.01 <sup>(a)</sup>	13.01 <sup>(a)</sup>	-	-	3.07	-	-
	3-2845	13.01 <sup>(a)</sup>	7.67 <sup>(a)</sup>	7.67 <sup>(a)</sup>	-	-	3.07	-	-
	3-4000	13.53 <sup>(a)</sup>	13.53 <sup>(a)</sup>	13.53 <sup>(a)</sup>	-	-	3.07	-	-
Paint Booths and Dip Tanks	3-2714	0.35	0.35	0.35	-	-	0.75	-	-
	3-2715	0.59	0.59	0.59	-	-	1.25	-	-
	3-2813	-	-	-	-	-	13.26	-	-
	3-2865	-	-	-	-	-	13.26	-	-
	3-2865A	-	-	-	-	-	13.26	-	-
	3-2867	-	-	-	-	-	13.26	-	-
	3-2870	-	-	-	-	-	13.26	-	-
	3-2874A	-	-	-	-	-	13.26	-	-
	3-2874B	-	-	-	-	-	13.26	-	-
	3-2869	-	-	-	-	-	9.78	-	-
	3-2872	-	-	-	-	-	9.78	-	-
Shot Peelers	3-1804	4.34 <sup>(a)</sup>	0.26 <sup>(a)</sup>	0.26 <sup>(a)</sup>	-	-	-	-	-
	3-1821	4.34 <sup>(a)</sup>	0.26 <sup>(a)</sup>	0.26 <sup>(a)</sup>	-	-	-	-	-
	3-1823	4.34 <sup>(a)</sup>	0.26 <sup>(a)</sup>	0.26 <sup>(a)</sup>	-	-	-	-	-
	3-1824	4.34 <sup>(a)</sup>	4.34 <sup>(a)</sup>	0.26 <sup>(a)</sup>	-	-	-	-	-
	3-1825	4.34 <sup>(a)</sup>	4.34 <sup>(a)</sup>	0.26 <sup>(a)</sup>	-	-	-	-	-
	3-1826	4.51 <sup>(a)</sup>	4.51 <sup>(a)</sup>	0.26 <sup>(a)</sup>	-	-	-	-	-
NG Combustion	0.74	2.98	2.98	0.24	39.21	2.16	32.93	49966.95	
Degreasers	-	-	-	-	-	3.52	-	-	
Fire pump engine	1.25	1.25	1.25	1.17	17.65	1.43	3.80	656.93	
<b>Total PTE of Entire Source</b>	<b>149.45</b>	<b>67.08</b>	<b>49.89</b>	<b>1.40</b>	<b>56.86</b>	<b>143.50</b>	<b>36.74</b>	<b>50623.89</b>	
<b>Title V Major Source Thresholds</b>	<b>NA</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100,000</b>	
<b>PSD Major Source Thresholds</b>	<b>250</b>	<b>250</b>	<b>250</b>	<b>250</b>	<b>250</b>	<b>--</b>	<b>250</b>	<b>100,000</b>	
<b>Emission Offset Major Source Thresholds</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>100</b>	<b>100</b>	<b>NA</b>	<b>NA</b>	

<b>IDEM Contact</b>
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- (a) Questions regarding this proposed permit can be directed to Mehul Sura at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 233-6868 or toll free at 1-800-451-6027 extension 3-6868.
- (b) A copy of the permit is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Permit Guide on the Internet at: <http://www.in.gov/idem/5881.htm>; and the Citizens' Guide to IDEM on the Internet at: <http://www.in.gov/idem/6900.htm>.

**ATSD Appendix A: Emission Calculations**  
**Emission Summary**

**Company Name:** Amsted Rail Company, Inc.  
**Address City IN Zip:** 4831 Holman Avenue, Hammond, Indiana 46327  
**Permit Number:** 089-33178-00204  
**Reviewer:** Mehul Sura  
**Date:** 12/20/2013

**Uncontrolled Emissions (tons/yr)**

	ID	PM	PM10	PM2.5	SO2	NOx	VOC	CO	CO2e	single HAP (Chromium)	combined HAPs
Grinders	3-0244	160.09	16.01	16.01	-	-	-	-	-	-	-
	3-0247	67.76	6.78	6.78	-	-	-	-	-	-	-
	3-0249	11.17	1.12	1.12	-	-	-	-	-	-	-
	3-0385	115.41	11.54	11.54	-	-	-	-	-	-	-
	3-0386	82.65	8.27	8.27	-	-	-	-	-	-	-
	3-0389	40.95	4.10	4.10	-	-	-	-	-	-	-
	3-0393	160.09	16.01	16.01	-	-	-	-	-	-	-
3-0394	26.06	2.61	2.61	-	-	-	-	-	-	-	
Quench Tanks	3-2821	45.99	45.99	45.99	-	-	3.07	-	-	-	-
	3-2838A	153.30	153.30	153.30	-	-	3.07	-	-	-	-
	3-2845	153.30	153.30	153.30	-	-	3.07	-	-	-	-
	3-4000	160.97	160.97	160.97	-	-	3.07	-	-	-	-
Paint Booths and Dip Tanks	3-2714	0.35	0.35	0.35	-	-	0.75	-	-	-	0.83
	3-2715	0.59	0.59	0.59	-	-	1.25	-	-	-	1.41
	3-2813	-	-	-	-	-	13.26	-	-	-	-
	3-2865	-	-	-	-	-	13.26	-	-	-	-
	3-2865A	-	-	-	-	-	13.26	-	-	-	-
	3-2867	-	-	-	-	-	13.26	-	-	-	-
	3-2870	-	-	-	-	-	13.26	-	-	-	-
	3-2874A	-	-	-	-	-	13.26	-	-	-	-
	3-2874B	-	-	-	-	-	13.26	-	-	-	-
	3-2869	-	-	-	-	-	9.78	-	-	-	-
	3-2872	-	-	-	-	-	9.78	-	-	-	-
	3-2873	-	-	-	-	-	9.78	-	-	-	-
	Shot Peeners	3-1804	0.42	0.36	0.36	-	-	-	-	-	0.005
3-1821		4.20	2.94	2.94	-	-	-	-	-	0.046	0.088
3-1823		7.36	5.15	5.15	-	-	-	-	-	0.081	0.15
3-1824		180.46	126.32	126.32	-	-	-	-	-	1.985	3.79
3-1825		180.46	126.32	126.32	-	-	-	-	-	1.985	3.79
3-1826		183.96	128.77	128.77	-	-	-	-	-	2.024	3.86
Natural Gas Combustion		0.74	2.98	2.98	0.24	39.21	2.16	32.93	49,967	-	0.74
Degreasers		-	-	-	-	-	3.52	-	-	-	-
Fire pump engine		1.25	1.25	1.25	1.17	17.65	1.43	3.80	657	-	1.54E-02
Total		1737.53	975.01	975.01	1.40	56.86	143.50	36.74	50623.89	6.13	14.69

**Potential To Emit (tons/year)**

	ID	PM	PM10	PM2.5	SO2	NOx	VOC	CO	CO2e	single HAP (Chromium)	combined HAPs
Grinders	3-0244				-	-	-	-	-	-	-
	3-0247				-	-	-	-	-	-	-
	3-0249				-	-	-	-	-	-	-
	3-0385	67.76 (a)	9.13 (a)	4.34 (a)	-	-	-	-	-	-	-
	3-0386				-	-	-	-	-	-	-
	3-0389				-	-	-	-	-	-	-
	3-0393				-	-	-	-	-	-	-
3-0394				-	-	-	-	-	-	-	
Quench Tanks	3-2821	13.01 (a)	4.60 (a)	4.60 (a)	-	-	3.07	-	-	-	-
	3-2838A	13.01 (a)	13.01 (a)	13.01 (a)	-	-	3.07	-	-	-	-
	3-2845	13.01 (a)	7.67 (a)	7.67 (a)	-	-	3.07	-	-	-	-
	3-4000	13.53 (a)	13.53 (a)	13.53 (a)	-	-	3.07	-	-	-	-
Paint Booths and Dip Tanks	3-2714	0.35	0.35	0.35	-	-	0.75	-	-	-	0.83
	3-2715	0.59	0.59	0.59	-	-	1.25	-	-	-	1.41
	3-2813	-	-	-	-	-	13.26	-	-	-	-
	3-2865	-	-	-	-	-	13.26	-	-	-	-
	3-2865A	-	-	-	-	-	13.26	-	-	-	-
	3-2867	-	-	-	-	-	13.26	-	-	-	-
	3-2870	-	-	-	-	-	13.26	-	-	-	-
	3-2874A	-	-	-	-	-	13.26	-	-	-	-
	3-2874B	-	-	-	-	-	13.26	-	-	-	-
	3-2869	-	-	-	-	-	9.78	-	-	-	-
	3-2872	-	-	-	-	-	9.78	-	-	-	-
	3-2873	-	-	-	-	-	9.78	-	-	-	-
	Shot Peelers	3-1804	4.34 (a)	0.26 (a)	0.26 (a)	-	-	-	-	-	0.043
3-1821		4.34 (a)	0.26 (a)	0.26 (a)	-	-	-	-	-	0.043	0.048
3-1823		4.34 (a)	0.26 (a)	0.26 (a)	-	-	-	-	-	0.043	0.048
3-1824		4.34 (a)	4.34 (a)	0.26 (a)	-	-	-	-	-	0.043	0.048
3-1825		4.34 (a)	4.34 (a)	0.26 (a)	-	-	-	-	-	0.043	0.048
3-1826		4.51 (a)	4.51 (a)	0.26 (a)	-	-	-	-	-	0.045	0.050
Natural Gas Combustion		0.74	2.98	2.98	0.24	39.21	2.16	32.93	49966.95	-	0.74
Degreasers		-	-	-	-	-	3.52	-	-	-	-
Fire pump engine		1.25	1.25	1.25	1.17	17.65	1.43	3.80	656.93	-	0.02
Total		149.45	67.08	49.89	1.40	56.86	143.50	36.74	50623.89	0.26	3.29

(a) PTE is based on PSD Minor Limit.

Natural gas combustion emissions includes combustion emissions from furnaces. There are no process emissions from the furnaces located at the source.

ATSD Appendix A: Emission Calculations  
Degreaser and Shot Peeners

Company Name: Amsted Rail Company, Inc.  
Address City IN Zip: 4831 Holman Avenue, Hammond, Indiana 46327  
Permit Number: 089-33178-00204  
Reviewer: Mehul Sura  
Date: 12/20/2013

**Degreasers**

Solvent Used: Safety-Kleen Premium Solvent/Safety-Kleen Premium Gold Solvent

Each Degreaser

POLLUTANT	Solvent Density (lbs/gal)	Usage for one Degreaser (gal/hr)	Potential Emissions from one Degreaser (lbs/hr)	Potential Emissions from one Degreaser (lbs/day)	Potential Emissions from one Degreaser (tons/yr)	Potential Emissions two Degreasers (tons/yr)
VOC	6.70	0.06	0.40	9.65	1.76	3.52
HAPs	0	0	0.00	0.00	0.00	0.00

Methodology

Potential Emissions from one Degreaser (lbs/hr) = Solvent Density (lbs/gal) x Usage (gal/hr)  
 Potential Emissions from one Degreaser (lbs/day) = Potential Emissions (lbs/hr) x 24 (hrs/day)  
 Potential Emissions from one Degreaser (tons/yr) = Potential Emissions (lbs/day) x 365 (days/yr)  
 Potential Emissions from two Degreasers (tons/yr) = Potential Emissions from one Degreaser (tons/yr) x 2 (Number of Degreasers)

**6 Shot Peeners**

Unit ID	Steel shots usage (tons/hr)	Steel shots usage (lb/hr)	Emission Factor				Potential to Emit (tons/yr)					PSD Minor Limit (lb/hr)			PSD Minor Limited PTE (tons/yr)				
			lb PM/lb steel shots	lb PM10/lb PM	Chromium (Cr) Content in steel shots	Manganese (Mn) Content in steel shots	PM	PM10	PM2.5	Cr	Mn	PM	PM10	PM2.5	PM	PM10	PM2.5	Cr	Mn
3-1804	0.012	24	0.004	0.86	1%	1.10%	0.42	0.36	0.36	0.0042	0.005	0.990	0.060	0.060	4.34	0.26	0.26	0.0434	0.0477
3-1821	0.12	240	0.004	0.70	1%	1.10%	4.20	2.94	2.94	0.0420	0.046	0.990	0.060	0.060	4.34	0.26	0.26	0.0434	0.0477
3-1823	0.21	420	0.004	0.70	1%	1.10%	7.36	5.15	5.15	0.0736	0.081	0.990	0.060	0.060	4.34	0.26	0.26	0.0434	0.0477
3-1824	5.15	10300	0.004	0.70	1%	1.10%	180.46	126.32	126.32	1.8046	1.985	0.990	0.060	0.060	4.34	4.34	0.26	0.0434	0.0477
3-1825	5.15	10300	0.004	0.70	1%	1.10%	180.46	126.32	126.32	1.8046	1.985	0.990	0.060	0.060	4.34	4.34	0.26	0.0434	0.0477
3-1826	5.25	10500	0.004	0.70	1%	1.10%	183.96	128.77	128.77	1.8396	2.024	1.030	1.030	0.060	4.51	4.51	0.26	0.0451	0.0496
							557	390	390	6	6				26.19	13.97	1.58	0.26	0.29

Methodology

PM and PM10 Emission Factors from STAPPA/ALAPCO "Air Quality Permits", Vol. I, Section 3 "Abrasive Blasting" (1991 edition)  
 PM2.5=PM10  
 Chromium and Manganese content in steel shots are provided by the source.  
 Steel shots usage (lb/hr) = steel shots usage (tons/hr) x 1/2000 (lbs/ton)  
 PM PTE (tons/yr) = steel shots usage (lb/hr) x lb PM / lb steel shots x 8760 (hrs/yr) / 2000 (lbs/ton)  
 PM10 PTE (tons/yr) = steel shots usage (lb/hr) x lb PM / lb steel shots x lb PM10 / lb PM x 8760 (hrs/yr) / 2000 (lbs/ton)  
 PM2.5 PTE (tons/yr) = PM10 Potential Emissions (tons/yr)  
 Chromium Potential Emissions (tons/yr) = PM Potential Emissions (tons/yr) x Chromium Content in steel shots  
 Manganese Potential Emissions (tons/yr) = PM Potential Emissions (tons/yr) x Manganese Content in steel shots  
 Particulate Limited PTE (tons/yr) = PSD Minor Limit (lb/hr) x 8760 (hrs/yr) / 2000 (lbs/ton)  
 HAP Limited PTE (tons/yr) = PM Limited PTE (tons/yr) x HAP Content in steel shots

**10 Grinders**

Unit ID	Throughput Rate (tons/hr)	BH Control Efficiency	Emission Factor (lb/ton steel)			PSD Minor Limit (lb/hr)			Potential Emissions (tons/yr)			PSD Minor Limited PTE (tons/yr)		
			PM	PM10	PM2.5	PM	PM10	PM2.5	PM	PM10	PM2.5	PM	PM10	PM2.5
3-0244	2.15	99%	17	1.7	1.7	0.990	2.085	0.990	160.09	16.01	16.01	4.34	9.13	4.34
3-0247	0.91	99%	17	1.7	1.7				67.76	6.78	6.78			
3-0249	0.15	99%	17	1.7	1.7				11.17	1.12	1.12			
3-0385	1.55	99%	17	1.7	1.7				115.41	11.54	11.54			
3-0386	1.11	99%	17	1.7	1.7				82.65	8.27	8.27			
3-0389	0.55	99%	17	1.7	1.7				40.95	4.10	4.10			
3-0393	2.15	99%	17	1.7	1.7				160.09	16.01	16.01			
3-0394	0.35	99%	17	1.7	1.7				26.06	2.61	2.61			

Methodology

Emission factors are from AP-42 Chapter 12.10, Gray Iron Foundries, Table 12.10-7, May 2003.  
 Potential Emissions (tons/yr) = Emission Factor (lb/ton steel) x Throughput Rate (tons/hr) x 8760 (hrs/yr) / 2000 (lbs/ton)  
 Limited PTE (tons/yr) = PSD Minor Limit (lb/hr) x 8760 (hrs/yr) / 2000 (lbs/ton)

Company Name: Amsted Rail Company, Inc.  
Address City IN Zip: 4831 Holman Avenue, Hammond, Indiana 46327  
Permit Number: 089-33178-00204  
Reviewer: Mehul Sura

4 Quench Tanks

Unit ID	Unit	Throughput Rate (tons/hr)	Emission Factor (lb/ton steel)				Emission Factor (lb/hr)	PSD Minor Limit (lb/hr)				Potential Emissions (tons/yr)				Limited PTE (tons/yr)			
			PM	PM <sub>10</sub>	PM <sub>2.5</sub>	VOC		PM	PM <sub>10</sub>	PM <sub>2.5</sub>	VOC	PM	PM <sub>10</sub>	PM <sub>2.5</sub>	VOC	PM	PM <sub>10</sub>	PM <sub>2.5</sub>	VOC
3-2821	Small Line Quench Tank	1.5	7.0	7.0	7.0	0.7	2.970	1.050	1.050	--	45.99	45.99	45.99	3.07	13.01	4.60	4.60	3.07	
3-2838A	Medium Line Quench Tank	5	7.0	7.0	7.0	0.7	2.970	2.970	2.970	--	153.30	153.30	153.30	3.07	13.01	13.01	13.01	3.07	
3-2845	Large Line Quench Tank	5	7.0	7.0	7.0	0.7	2.970	1.750	1.750	--	153.30	153.30	153.30	3.07	13.01	7.67	7.67	3.07	
3-4000	Line 4 Quench Tank	5.25	7.0	7.0	7.0	0.7	3.090	3.090	3.090	--	160.97	160.97	160.97	3.07	13.53	13.53	13.53	3.07	

PM<sub>10</sub>/PM<sub>2.5</sub> emission factors provided by the source are based on mass balance of the amount of oil used and the weight of units treated. These emission factors were used in SSM 089-31440-00204, issued for this source on July 2, 2012.

VOC emission factor is from compliance test performed for Medium Line Coil Spring Manufacturing Process on January 13, 2012.

Potential PM<sub>10</sub>/PM<sub>2.5</sub> Emissions (tons/yr) = Throughput Rate (tons/hr) x Emission Factor (lb/ton steel) x 8760 (hrs/yr) / 2000 (lbs/ton)

Potential VOC Emissions (tons/yr) = Emission Factor (lb/hr) x 8760 (hrs/yr) / 2000 (lbs/ton)

Limited PM<sub>10</sub>/PM<sub>2.5</sub> PTE (tons/yr) = PM<sub>10</sub>/PM<sub>2.5</sub> PSD Minor Limit (lb/hr) x 8760 (hrs/yr) / 2000 (lbs/ton)

Limited VOC PTE (tons/yr) = Potential VOC Emissions (tons/yr)

Paint Booths and Dip Tanks - PM and VOC

Unit ID	Process	Material	Density (Lb/Gal)	Weight % Volatile (H <sub>2</sub> O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	usage (gal/hr)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency		
3-2714	Paint Spray Booth	Aquacron 880	9.2	71.45%	41.1%	30.4%	0.0%	28.55%	0.061	2.79	2.79	0.17	4.09	0.75	0.35	9.78	50%		
3-2715	Paint Spray Booth	Aquacron 880	9.2	71.45%	41.1%	30.4%	0.0%	28.55%	0.102	2.79	2.79	0.28	6.84	1.25	0.59	9.78	50%		
3-2813	Dip Coating	W9012A Clear Co	8.6	69.81%	68.1%	1.7%	69.9%	28.23%	6.100	0.50	0.15	0.91	72.64	13.26	0.00	0.53	100%		
3-2865	Dip Coating	W9012A Clear Co	8.6	69.81%	68.1%	1.7%	69.9%	28.23%	6.100	0.50	0.15	0.91	72.64	13.26	0.00	0.53	100%		
3-2865A	Dip Coating	W9012A Clear Co	8.6	69.81%	68.1%	1.7%	69.9%	28.23%	6.100	0.50	0.15	0.91	72.64	13.26	0.00	0.53	100%		
3-2867	Dip Coating	W9012A Clear Co	8.6	69.81%	68.1%	1.7%	69.9%	28.23%	6.100	0.50	0.15	0.91	72.64	13.26	0.00	0.53	100%		
3-2870	Dip Coating	W9012A Clear Co	8.6	69.81%	68.1%	1.7%	69.9%	28.23%	6.100	0.50	0.15	0.91	72.64	13.26	0.00	0.53	100%		
3-2874A	Dip Coating	W9012A Clear Co	8.6	69.81%	68.1%	1.7%	69.9%	28.23%	6.100	0.50	0.15	0.91	72.64	13.26	0.00	0.53	100%		
3-2874B	Dip Coating	W9012A Clear Co	8.6	69.81%	68.1%	1.7%	69.9%	28.23%	6.100	0.50	0.15	0.91	72.64	13.26	0.00	0.53	100%		
3-2869	Dip Coating	W9012A Clear Co	8.6	69.81%	68.1%	1.7%	69.9%	28.23%	4.500	0.50	0.15	0.67	53.58	9.78	0.00	0.53	100%		
3-2872	Dip Coating	W9012A Clear Co	8.6	69.81%	68.1%	1.7%	69.9%	28.23%	4.500	0.50	0.15	0.67	53.58	9.78	0.00	0.53	100%		
3-2873	Dip Coating	W9012A Clear Co	8.6	69.81%	68.1%	1.7%	69.9%	28.23%	4.500	0.50	0.15	0.67	53.58	9.78	0.00	0.53	100%		
<b>Total PTE</b>			<b>Add worst case coating to all solvents</b>													<b>8.83</b>	<b>680.12</b>	<b>124.12</b>	<b>0.94</b>

METHODOLOGY

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

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

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

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

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

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

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

Total = Worst Coating + Sum of all solvents used

Paint Booths- HAPs

Unit ID	Process	Material	Density (Lb/Gal)	usage (gal/hr)	Weight % Triethalamine	Weight % Cobalt Compounds	Triethalamine Emissions (ton/yr)	Cobalt Compounds Emissions (ton/yr)
3-2714	Paint Spray Booth	Aquacron 880	7.80	0.06100	20.00%	20.00%	0.42	0.42
3-2715	Paint Spray Booth	Aquacron 880	7.90	0.10200	25.00%	15.00%	0.88	0.53

METHODOLOGY

HAPS emission rate (tons/yr) = Density (lb/gal) x Usage (gal/hr) x Weight % HAP x 8760 hrs/yr x 1 ton/2000 lbs

Only Aquacron 880 contains HAPs. No other coating material used at the source contain HAPs.

Company Name: Griffin Industries, Inc.  
Address City IN Zip: CR 400 West, Route 1 Box 112, Newberry, IN 47499  
Part 70 Operating Permit Renewal No.: T055-32418-00008  
Reviewer: Mehul Sura  
Application Received: 1/23/2013

Unit ID	Heat Input Capacity (MMBtu/hr)	HHV (mmBtu/mmscf)	Potential Throughput (MMCF/yr)
2-5085	8	1020	68.7
2-5006	1.5	1020	12.9
2-5163	5.1	1020	43.8
2-5075	13	1020	111.6
2-5014	5.2	1020	44.7
2-5015	5.2	1020	44.7
2-5027	20.5	1020	176.1
2-5036	2.5	1020	21.5
2-5164	9.8	1020	84.2

Unit ID	Heat Input Capacity (MMBtu/hr)	HHV (mmBtu/mmscf)	Potential Throughput (MMCF/yr)
2-5097A	5	1020	42.9
2-5201	1.25	1020	10.7
2-5202	1.25	1020	10.7
2-5203A	6.5	1020	55.8
2-5007	1.5	1020	12.9
2-5204A	2.5	1020	21.5
2-5204B	2.5	1020	21.5
2-5097	5.1	1021	43.8

Emission Factor in lb/MMCF	Pollutant (tons/yr)						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
Emission Rate in lb/MMBtu	0.0019	0.0075	0.0075	0.0006	0.0980	0.0054	0.0824
2-5085	0.065	0.26	0.26	0.02	3.44	0.19	2.89
2-5006	0.012	0.05	0.05	0.00	0.64	0.04	0.54
2-5163	0.042	0.17	0.17	0.01	2.19	0.12	1.84
2-5075	0.106	0.42	0.42	0.03	5.58	0.31	4.69
2-5014	0.042	0.17	0.17	0.01	2.23	0.12	1.88
2-5015	0.042	0.17	0.17	0.01	2.23	0.12	1.88
2-5027	0.167	0.67	0.67	0.05	8.80	0.48	7.39
2-5036	0.020	0.08	0.08	0.01	1.07	0.06	0.90
2-5164	0.080	0.32	0.32	0.03	4.21	0.23	3.53
2-5097A	0.041	0.16	0.16	0.01	2.15	0.12	1.80
2-5201	0.010	0.04	0.04	0.00	0.54	0.03	0.45
2-5202	0.010	0.04	0.04	0.00	0.54	0.03	0.45
2-5203A	0.053	0.21	0.21	0.02	2.79	0.15	2.34
2-5007	0.012	0.05	0.05	0.00	0.64	0.04	0.54
2-5204A	0.020	0.08	0.08	0.01	1.07	0.06	0.90
2-5204B	0.020	0.08	0.08	0.01	1.07	0.06	0.90
2-5097	0.042	0.17	0.17	0.01	2.19	0.12	1.84
<b>Total</b>	<b>0.745</b>	<b>2.980</b>	<b>2.980</b>	<b>0.235</b>	<b>39.205</b>	<b>2.156</b>	<b>32.932</b>

\*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.  
PM2.5 emission factor is filterable and condensable PM2.5 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  
Emission Rate in lb/MMBtu = Emission Factor (lb/MMCF) / 1020 (MMBtu/MMCF)  
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  
Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu  
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Emission Factor in lb/MMCF	HAPs - Organics (tons/yr)					HAPs - Metals (tons/yr)				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene	Lead	Cadmium	Chromium	Manganese	Nickel
2-5085	0.002	0.001	0.075	1.800	0.003	0.001	0.001	0.001	0.000	0.002
2-5006	7.2E-05	4.1E-05	2.6E-03	6.2E-02	1.2E-04	1.7E-05	3.8E-05	4.8E-05	1.3E-05	7.2E-05
2-5163	1.4E-05	7.7E-06	4.8E-04	1.2E-02	2.2E-05	3.2E-06	7.1E-06	9.0E-06	2.4E-06	1.4E-05
2-5075	4.6E-05	2.6E-05	1.6E-03	3.9E-02	7.4E-05	1.1E-05	2.4E-05	3.1E-05	8.3E-06	4.6E-05
2-5014	1.2E-04	6.7E-05	4.2E-03	1.0E-01	1.9E-04	2.8E-05	6.1E-05	7.8E-05	2.1E-05	1.2E-04
2-5015	4.7E-05	2.7E-05	1.7E-03	4.0E-02	7.6E-05	1.1E-05	2.5E-05	3.1E-05	8.5E-06	4.7E-05
2-5027	4.7E-05	2.7E-05	1.7E-03	4.0E-02	7.6E-05	1.1E-05	2.5E-05	3.1E-05	8.5E-06	4.7E-05
2-5036	1.8E-04	1.1E-04	6.6E-03	1.6E-01	3.0E-04	4.4E-05	9.7E-05	1.2E-04	3.3E-05	1.8E-04
2-5097A	2.3E-05	1.3E-05	8.1E-04	1.9E-02	3.7E-05	5.4E-06	1.2E-05	1.5E-05	4.1E-06	2.3E-05
2-5164	8.8E-05	5.0E-05	3.2E-03	7.6E-02	1.4E-04	2.1E-05	4.6E-05	5.9E-05	1.6E-05	8.8E-05
2-5097A	4.5E-05	2.6E-05	1.6E-03	3.9E-02	7.3E-05	1.1E-05	2.4E-05	3.0E-05	8.2E-06	4.5E-05
2-5201	1.1E-05	6.4E-06	4.0E-04	9.7E-03	1.8E-05	2.7E-06	5.9E-06	7.5E-06	2.0E-06	1.1E-05
2-5202	1.1E-05	6.4E-06	4.0E-04	9.7E-03	1.8E-05	2.7E-06	5.9E-06	7.5E-06	2.0E-06	1.1E-05
2-5203A	5.9E-05	3.3E-05	2.1E-03	5.0E-02	9.5E-05	1.4E-05	3.1E-05	3.9E-05	1.1E-05	5.9E-05
2-5007	1.4E-05	7.7E-06	4.8E-04	1.2E-02	2.2E-05	3.2E-06	7.1E-06	9.0E-06	2.4E-06	1.4E-05
2-5204A	2.3E-05	1.3E-05	8.1E-04	1.9E-02	3.7E-05	5.4E-06	1.2E-05	1.5E-05	4.1E-06	2.3E-05
2-5204B	2.3E-05	1.3E-05	8.1E-04	1.9E-02	3.7E-05	5.4E-06	1.2E-05	1.5E-05	4.1E-06	2.3E-05
2-5097	4.6E-05	2.6E-05	1.6E-03	3.9E-02	7.4E-05	1.1E-05	2.4E-05	3.1E-05	8.3E-06	4.6E-05
<b>Total</b>	<b>0.001</b>	<b>0.000</b>	<b>0.029</b>	<b>0.706</b>	<b>0.001</b>	<b>0.00020</b>	<b>0.00043</b>	<b>0.00055</b>	<b>0.00015</b>	<b>0.00082</b>

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

Emission Factor in lb/MMCF	Greenhouse Gas (tons/yr)			Summed Potential Emissions in tons/yr	CO2e Total in tons/yr
	CO2	CH4	N2O		
2-5085	120,000	2.3	2.2		
2-5006	4,122	0.1	0.1	4,123	4,147
2-5163	773	0.0	0.0	773	778
2-5075	2,628	0.1	0.0	2,628	2,644
2-5014	6,699	0.1	0.1	6,699	6,739
2-5015	2,680	0.1	0.0	2,680	2,695
2-5027	2,680	0.1	0.0	2,680	2,695
2-5036	10,564	0.2	0.2	10,564	10,626
2-5097A	1,288	0.0	0.0	1,288	1,296
2-5164	5,050	0.1	0.1	5,050	5,080
2-5097A	2,576	0.0	0.0	2,577	2,592
2-5201	644	0.0	0.0	644	648
2-5202	644	0.0	0.0	644	648
2-5203A	3,349	0.1	0.1	3,350	3,369
2-5007	773	0.0	0.0	773	778
2-5204A	1,288	0.0	0.0	1,288	1,296
2-5204B	1,288	0.0	0.0	1,288	1,296
2-5097	2,625	0.1	0.0	2,626	2,641
<b>Total</b>				<b>49,674</b>	<b>49,967</b>

**Methodology**

The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.  
Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.  
Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.  
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton  
CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (25) + N2O Potential Emission ton/yr x N2O GWP (298).

**ATSD Appendix A: Emission Calculations**  
**Reciprocating Internal Combustion Engines - Diesel Fuel**  
**Output Rating (<=600 HP)**  
**Maximum Input Rate (<=4.2 MMBtu/hr)**  
 Fire pump engine

**Company Name:** Amsted Rail Company, Inc.  
**Address City IN Zip:** 4831 Holman Avenue, Hammond, Indiana 46327  
**Permit Number:** 089-33178-00204  
**Reviewer:** Mehul Sura  
**Date:** 12/20/2013

**Emissions calculated based on output rating (hp)**

Output Horsepower Rating (hp)	130.0
Maximum Hours Operated per Year	8760
Potential Throughput (hp-hr/yr)	1,138,800

	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/hp-hr	0.0022	0.0022	0.0022	0.0021	0.0310	0.0025	0.0067
Potential Emission in tons/yr	1.25	1.25	1.25	1.17	17.65	1.43	3.80

\*PM and PM2.5 emission factors are assumed to be equivalent to PM10 emission factors. No information was given regarding which method was used to determine the factor or the fraction of PM10 which is condensable.

**Hazardous Air Pollutants (HAPs)**

	Pollutant							
	Benzene	Toluene	Xylene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Acrolein	Total PAH HAPs***
Emission Factor in lb/hp-hr****	6.53E-06	2.86E-06	2.00E-06	2.74E-07	8.26E-06	5.37E-06	6.48E-07	1.18E-06
Potential Emission in tons/yr	3.72E-03	1.63E-03	1.14E-03	1.56E-04	4.70E-03	3.06E-03	3.69E-04	6.70E-04

\*\*\*PAH = Polyaromatic Hydrocarbon (PAHs are considered HAPs, since they are considered Polycyclic Organic Matter)

\*\*\*\*Emission factors in lb/hp-hr were calculated using emission factors in lb/MMBtu and a brake specific fuel consumption of 7,000 Btu / hp-hr (AP-42 Table 3.3-1).

<b>Potential Emission of Total HAPs (tons/yr)</b>	<b>1.54E-02</b>
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**Green House Gas Emissions (GHG)**

	Pollutant		
	CO2	CH4	N2O
Emission Factor in lb/hp-hr	1.15E+00	4.63E-05	9.26E-06
Potential Emission in tons/yr	6.55E+02	2.64E-02	5.27E-03

<b>Summed Potential Emissions in tons/yr</b>	<b>6.55E+02</b>
<b>CO2e Total in tons/yr</b>	<b>6.57E+02</b>

**Methodology**

Emission Factors are from AP42 (Supplement B 10/96), Tables 3.3-1 and 3.3-2

CH4 and N2O Emission Factor from 40 CFR 98 Subpart C Table C-2.

Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.

Potential Throughput (hp-hr/yr) = [Output Horsepower Rating (hp)] \* [Maximum Hours Operated per Year]

Potential Emission (tons/yr) = [Potential Throughput (hp-hr/yr)] \* [Emission Factor (lb/hp-hr)] / [2,000 lb/ton]

CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (25) + N2O

Potential Emission ton/yr x N2O GWP (298).

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

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

**Source Background and Description**

Source Name: Amsted Rail Company, Inc.  
 Source Location: 4831 Hohman Avenue, Hammond, Indiana 46327  
 County: Lake  
 SIC Code: 3493 (Steel Springs, Except Wire)  
 Permit Renewal No.: 089-33178-00204  
 Permit Reviewer: Mehul Sura

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from Amsted Rail Company, Inc. relating to the operation of a stationary steel coil spring manufacturing plant. On May 8, 2013, Amsted Rail Company, Inc. submitted an application to the OAQ requesting to renew its operating permit. Amsted Rail Company, Inc. was issued its first Part 70 Operating Permit Renewal T089-23826-00204 on February 20, 2009.

**Permitted Emission Units and Pollution Control Equipment**

The source consists of the following permitted emission units:

- (a) Two (2) Natural gas-fired furnaces, equipped with no control and venting inside, which include the following units:

Unit ID	Unit Description	Maximum Design Capacity (MMBtu/hr heat input)	Year Constructed
2-5027	Large Line Bar Furnace	20.5	1938
2-5075	Medium Line Bar Furnace	13.0	1956

- (b) Ten (10) Coil Spring Grinders, which include the following:

Unit ID	Unit Description	Maximum Design Rate (tons springs ground per hour)	Year Constructed
3-0244	#1 Mattson (Large) Grinder	2.15	1989
3-0247	Torrington Ferris Wheel Grinder	0.91	1942
3-0249	Gardner Paddle Wheel Grinder	0.15	1947
3-0385	#1 Beasley Ferris Wheel Grinder	1.55	1978
3-0386	#2 Beasley Ferris Wheel Grinder	1.11	1978
3-0389	Gardner Tub Grinder	0.55	1980
3-0393	#2 Mattson (Small) Grinder	2.15	1989
3-0394	Beasley Swing Grinder	0.35	1998
3-0396	Vertical Opposing Disc Grinder	1.11	Prior to 1994
3-0397	Vertical Opposing Disc Grinder	1.55	Prior to 1994

All the coil spring grinders above are controlled using a pulse-jet baghouse, identified as 3-3037, exhausting to Stack 3.

- (c) Four (4) Coil Spring Manufacturing Process Lines, which include the following:

- (1) Small Line Coil Spring Manufacturing Process, with a maximum capacity of 1.5 tons/hr of coil springs manufactured, includes:
  - (i) One (1) oil quench tank, identified as 3-2821, constructed in 1973, using an oil smoke filter, to control particulate emissions (oil mists) generated during the quenching operation, and venting inside.
  - (ii) One (1) natural gas-fired draw furnace, identified as 2-5163, constructed in 1973, with a maximum design capacity of 5.1 MMBtu/hr heat input, used to stress-relieve the newly coiled springs after the quench operation, no control.
  
- (2) Medium Line Coil Spring Manufacturing Process, with a maximum capacity of 5.0 tons/hr of coil springs manufactured, includes:
  - (i) One (1) oil quench tank, identified as 3-2838A, constructed in 2011, using an oil smoke filter, identified as 3-3027A, to control particulate emissions (oil mists) generated during the quenching operation, and venting inside.
  - (ii) One (1) natural gas-fired draw furnace, identified as 2-5097, constructed in 2011, with a maximum design capacity of 5.1 MMBtu/hr heat input, used to stress-relieve the newly coiled springs after the quench operation, no control.
  
- (3) Large Line Coil Spring Manufacturing Process, with a maximum capacity of 5 tons/hr of coil springs manufactured, includes:
  - (i) One (1) oil quench tank, identified as 3-2845, constructed in 1959, using an oil smoke filter, identified as 3-3036, to control particulate emissions (oil mists) generated during the quenching operation, and venting inside.  
  
Note: During the review of this renewal, Amsted Rail Company, Inc. informed IDEM that the electrostatic precipitator equipped on this oil quench tank is no longer in service. Therefore, the electrostatic precipitator has been removed from the description and all the requirements related to this electrostatic precipitator will be removed through this renewal.
  - (ii) One (1) natural gas-fired draw furnace, identified as 2-5164, constructed in 1959, with a maximum design capacity of 9.8 MMBtu/hr heat input, used to stress-relieve the newly coiled springs after the quench operation, no control.
  
- (4) Line 4 Coil Spring Manufacturing Process, with a maximum capacity of 5.25 tons of coil springs manufactured per hour, includes:
  - (i) One (1) oil quench tank, identified as 3-4000, constructed in 2012, using an oil smoke filter, identified as 3-4001, to control particulate emissions (oil mists) generated during the quenching operation, and venting inside.
  - (ii) One (1) natural gas-fired draw furnace, identified as 2-5097A, constructed in 2012, with a maximum design capacity of 5.0 MMBtu/hr heat input, used to stress relieve the newly coiled springs after the quench operation, no control.

Note: The source has informed IDEM through this renewal that Quench Tanks (3-2821, 3-2838A, 3-2845, and 3-4000) are venting inside. Therefore, the stack references have been removed for these Quench Tanks.

(d) Two (2) Paint Spray Booths, which include the following:

- (1) Paint Spray Booth, identified as 3-2714, constructed in 1980, with a maximum capacity of 0.102 gallons of coating per hour, coating steel coil springs, using High Volume Low Pressure (HVLV) Spray Application method and dry filters - double wall as PM control, and venting inside.
- (2) Paint Spray Booth, identified as 3-2715, constructed in 1989, with a maximum capacity of 0.061 gallons of coating per hour, coating steel coil springs, using High Volume Low Pressure (HVLV) Spray Application method and using dry filters - double wall as PM control, and venting inside.

(e) Ten (10) Coil Spring Coating Dip Tanks, for application of rust preventative coatings to steel coil springs, no control, venting inside and include the following:

Unit ID	Coating	Coating Usage (gal/hr)	Year Constructed
3-2813	Water-based Clear Coating	6.1	Prior to 1994
3-2865	Water-based Clear Coating		Prior to 1994
3-2865A	Water-based Clear Coating		Prior to 1994
3-2867	Water-based Clear Coating		2011
3-2870	Water-based Clear Coating		Prior to 1994
3-2869	Solvent-based or Water-based Clear Coating	4.5	Prior to 1994
3-2872	Solvent-based or Water-based Clear Coating		Prior to 1994
3-2873	Solvent-based or Water-based Clear Coating		Prior to 1994
3-2874A	Water-based Clear Coating	4.5	2011
3-2874B	Water-based Clear Coating	4.5	2012

(f) Six (6) Shot Peeners, which include the following units:

- (1) Pangborn Shot Peener, identified as 3-1804, with a maximum capacity of 0.012 tons steel shots used per hour, using a baghouse, identified as 3-3017, as control, constructed in 1964, and exhausting to Stack 9.
- (2) Wheelabrator Shot Peener, identified as 3-1821, with a maximum capacity of 0.12 tons steel shots used per hour, using a baghouse, identified as 3-3022, as control, constructed in 1972, and exhausting to Stack 11.
- (3) Wheelabrator Shot Peener, identified as 3-1823, with a maximum capacity of 0.21 tons steel shots used per hour, using a baghouse, identified as 3-1823, as control, constructed in 1980, and exhausting to Stack 12.
- (4) One (1) Shot Peener, identified as 3-1824, constructed in 2011, with a maximum capacity of 5.15 tons steel parts used per hour, using a baghouse, identified as 3-3024, for control of particulate matter emissions, and exhausting to Stack 24.
- (5) One (1) Shot Peener, identified as 3-1825, constructed in 2011, with a maximum capacity of 5.15 tons steel parts used per hour, using a baghouse, identified as 3-3025, for control of particulate matter emissions, and exhausting to Stack 25.

- (6) One (1) Shot Peener, identified as 3-1826, constructed in 2012, with a maximum capacity of 5.25 tons of steel parts per hour, using a baghouse, identified as 3-1826A, for particulate matter control, and exhausting to Stack 26.

Note: Shot Peener, identified as 3-1826, has been installed but not begun its operation at the time of this review.

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

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

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

No emission unit and Pollution Control Equipment have been removed from the source since the first Part 70 Operating Permit Renewal T089-23826-00204 issued on February 20, 2009.

**Insignificant Activities**

The source also consists of the following insignificant activities:

- (a) Space heaters, process heaters, heat treat furnaces or boilers using natural gas-fired combustion sources, regulated by 326 IAC 6.8-2-4(b), with heat input equal to or less than ten million (10,000,000) British thermal units per hour, which include the following units:

Unit ID	Unit Description	Maximum Design Capacity (MMBtu/hr heat input)
2-5006	Small Line Slot Furnace	1.5
2-5014	Medium Line Slot Furnace	5.2 (for Units 2-5014 and 2-5015 combined)
2-5015	Medium Line Slot Furnace	
2-5036	Large Line Slot Furnace	2.5
2-5085	Small Line Bar Furnace	8.0
2-5201	Line 4 Slot Furnace	1.25
2-5202	Line 4 Slot Furnace	1.25
2-5203A	Line 4 Bar Furnace	6.5
2-5203B	Line 4 Bar Furnace	6.5

- (b) One (1) 130-hp emergency fire pump diesel engine, constructed in 1947.  
  
Under 40 CFR 63, Subpart ZZZZ, the emergency fire pump engine considered existing RICE.
- (c) Two (2) Cold Cleaner Degreasers, each with maximum capacity of 0.06 gallons per hour, with solvent not remotely stored, not heated, or agitated and solvent spray is not used.
- (d) Paved and unpaved roads and parking lots with public access.
- (e) The following equipment related to manufacturing activities not resulting in the emissions of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.

- (f) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4,000 actual cubic feet per minute, including the following: deburring, buffing, polishing, abrasive blasting, pneumatic conveying and woodworking operations.
- (g) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (h) A gasoline fuel transfer dispensing operation handling less than or equal to one thousand three hundred (1,300) gallons per day and filling storage tanks having a capacity of less than ten thousand five hundred (10,500) gallons. Such storage tanks may be in a fixed location or on mobile equipment.

Under 40 CFR 63, Subpart CCCCCC, it is considered an existing affected source.

- (i) A petroleum fuel or other than gasoline dispensing facility, having a storage tank capacity less than or equal to ten thousand five hundred (10,500) gallons, and dispensing three thousand five hundred (3,500) gallons per day or less.
- (j) Application of oils, greases, lubricants or other non-volatile materials applied as temporary protective coatings.
- (k) Routine maintenance and repair of buildings, structures or vehicles at the source where air emissions from those activities would not be associated with any production process, including the following: purging of gas lines and purging of vessels.
- (l) Two (2) quench oil heaters, constructed in 2012, identified as 2-5204A and 2-5204 B, and rated at 2.5 MMBtu/hr, each.
- (m) Production related activities, including the following: Machining where an aqueous cutting coolant continuously floods the machining interface.

<b>Existing Approvals</b>
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Since the issuance of the Part 70 Operating Permit T089-23826-00204 on February 20, 2009, the source has constructed or has been operating under the following additional approvals:

- (a) Administrative Amendment No. 089-27976-00204 issued on May 28, 2009
- (b) Significant Source Modification No. 089-30392-00204 issued on July 22, 2011
- (c) Significant Permit Modification No. 089-30397-00204 issued on August 12, 2011
- (d) Administrative Amendment No. 089-30909-00204 issued on September 22, 2011
- (e) Significant Permit Modification No. 089-30862-00204 issued on January 4, 2012
- (f) Administrative Amendment No. 089-31340-00204 issued on January 17, 2012
- (g) Interim Significant Source Modification No. 089-31440I-00204 issued on March 30, 2012
- (h) Significant Source Modification No. 089-31440-00204 issued on July 2, 2012

- (i) Significant Permit Modification No. 089-31498-00204 issued on July 24, 2012
- (j) Administrative Amendment No. 089-32250-00204 issued on September 7, 2012

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

<b>Enforcement Issue</b>
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There are no enforcement actions pending.

<b>Emission Calculations</b>
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See Appendix A of this document for detailed emission calculations.

<b>County Attainment Status</b>
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The source is located in Lake County.

Pollutant	Designation
SO <sub>2</sub>	Better than national standards.
CO	Attainment effective February 18, 2000, for the part of the city of East Chicago bounded by Columbus Drive on the north; the Indiana Harbor Canal on the west; 148 <sup>th</sup> Street, if extended, on the south; and Euclid Avenue on the east. Unclassifiable or attainment effective November 15, 1990, for the remainder of East Chicago and Lake County.
O <sub>3</sub>	On June 11, 2012, the U.S. EPA designated Lake County nonattainment, for the 8-hour ozone standard. <sup>12</sup>
PM <sub>2.5</sub>	Unclassifiable or attainment effective February 6, 2012, for the annual PM <sub>2.5</sub> standard.
PM <sub>2.5</sub>	Unclassifiable or attainment effective December 13, 2009, for the 24-hour PM <sub>2.5</sub> standard.
PM <sub>10</sub>	Attainment effective March 11, 2003, for the cities of East Chicago, Hammond, Whiting, and Gary. Unclassifiable effective November 15, 1990, for the remainder of Lake County.
NO <sub>2</sub>	Cannot be classified or better than national standards.
Pb	Unclassifiable or attainment effective December 31, 2011.

<sup>1</sup>The U. S. EPA has acknowledged in both the proposed and final rulemaking for this redesignation that the anti-backsliding provisions for the 1-hour ozone standard no longer apply as a result of the redesignation under the 8-hour ozone standard. Therefore, permits in Lake County are no longer subject to review pursuant to Emission Offset, 326 IAC 2-3 for the 1-hour standard.

<sup>2</sup>The department has filed a legal challenge to U.S. EPA's designation in 77 FR 34228.

- (a) **Ozone Standards**  
 U.S. EPA, in the Federal Register Notice 77 FR 112 dated June 11, 2012, has designated Lake County as nonattainment for ozone. On August 1, 2012 the air pollution control board issued an emergency rule adopting the U.S. EPA's designation. This rule became effective, August 9, 2012. IDEM, does not agree with U.S. EPA's designation of nonattainment. IDEM filed a suit against US EPA in the US Court of Appeals for the DC Circuit on July 19, 2012. However, in order to ensure that sources are not potentially liable for a violation of the Clean Air Act, the OAQ is following the U.S. EPA's designation. Volatile organic compounds (VOC) and Nitrogen Oxides (NO<sub>x</sub>) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO<sub>x</sub> emissions are considered when evaluating the rule applicability relating to ozone.

Therefore, VOC and NO<sub>x</sub> emissions were evaluated pursuant to the requirements of Emission Offset, 326 IAC 2-3. See the State Rule Applicability – Entire Source section.

- (b) **PM2.5**  
Lake County has been classified as attainment for PM2.5. On May 8, 2008 U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for PM2.5 emissions. These rules became effective on July 15, 2008. On May 4, 2011 the air pollution control board issued an emergency rule establishing the direct PM2.5 significant level at ten (10) tons per year. This rule became effective, June 28, 2011. Therefore, direct PM2.5, SO<sub>2</sub>, and NO<sub>x</sub> emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability – Entire Source section.
- (c) **Other Criteria Pollutants**  
Lake County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

#### **Fugitive Emissions**

Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7, and there is no applicable New Source Performance Standard that was in effect on August 7, 1980, fugitive emissions are not counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

#### **Unrestricted Potential Emissions**

Appendix A of this TSD reflects the unrestricted potential emissions of the source.

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM, PM10, PM2.5 and VOC, each, is equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7 and will be issued a Part 70 Operating Permit Renewal.
- (c) The potential to emit (as defined in 326 IAC 2-7-1(29)) of GHGs is less than one hundred thousand (100,000) tons of CO<sub>2</sub> equivalent emissions (CO<sub>2</sub>e) per year.
- (d) 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.

#### **Part 70 Permit Conditions**

This source is subject to the requirements of 326 IAC 2-7, because the source met the following:

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

#### **Potential to Emit After Issuance**

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

Potential To Emit of the Entire Source After Issuance of Renewal (tons/year)									
Process	Emission Unit ID	PM	PM10	PM2.5	SO2	NOx	VOC	CO	CO2e
Grinders	3-0244	67.76 <sup>(a)</sup>	9.13 <sup>(a)</sup>	4.34 <sup>(a)</sup>	-	-	-	-	-
	3-0247				-	-	-	-	-
	3-0249				-	-	-	-	-
	3-0385				-	-	-	-	-
	3-0386				-	-	-	-	-
	3-0389				-	-	-	-	-
	3-0393				-	-	-	-	-
	3-0394				-	-	-	-	-
	3-0396				8.28 <sup>(a)</sup>	-	-	-	-
3-0397	11.54 <sup>(a)</sup>	-	-	-	-				
Quench Tanks	3-2821	13.01 <sup>(a)</sup>	4.60 <sup>(a)</sup>	4.60 <sup>(a)</sup>	-	-	3.07	-	-
	3-2838A	13.01 <sup>(a)</sup>	13.01 <sup>(a)</sup>	13.01 <sup>(a)</sup>	-	-	3.07	-	-
	3-2845	13.01 <sup>(a)</sup>	7.67 <sup>(a)</sup>	7.67 <sup>(a)</sup>	-	-	3.07	-	-
	3-4000	13.53 <sup>(a)</sup>	13.53 <sup>(a)</sup>	13.53 <sup>(a)</sup>	-	-	3.07	-	-
Paint Booths and Dip Tanks	3-2714	0.35	0.35	0.35	-	-	0.75	-	-
	3-2715	0.59	0.59	0.59	-	-	1.25	-	-
	3-2813	-	-	-	-	-	13.26	-	-
	3-2865	-	-	-	-	-	13.26	-	-
	3-2865A	-	-	-	-	-	13.26	-	-
	3-2867	-	-	-	-	-	13.26	-	-
	3-2870	-	-	-	-	-	13.26	-	-
	3-2874A	-	-	-	-	-	13.26	-	-
	3-2874B	-	-	-	-	-	13.26	-	-
	3-2869	-	-	-	-	-	9.78	-	-
	3-2872	-	-	-	-	-	9.78	-	-
3-2873	-	-	-	-	-	9.78	-	-	
Shot Peelers	3-1804	4.34 <sup>(a)</sup>	0.26 <sup>(a)</sup>	0.26 <sup>(a)</sup>	-	-	-	-	-
	3-1821	4.34 <sup>(a)</sup>	0.26 <sup>(a)</sup>	0.26 <sup>(a)</sup>	-	-	-	-	-
	3-1823	4.34 <sup>(a)</sup>	0.26 <sup>(a)</sup>	0.26 <sup>(a)</sup>	-	-	-	-	-
	3-1824	4.34 <sup>(a)</sup>	4.34 <sup>(a)</sup>	0.26 <sup>(a)</sup>	-	-	-	-	-
	3-1825	4.34 <sup>(a)</sup>	4.34 <sup>(a)</sup>	0.26 <sup>(a)</sup>	-	-	-	-	-
	3-1826	4.51 <sup>(a)</sup>	4.51 <sup>(a)</sup>	0.26 <sup>(a)</sup>	-	-	-	-	-
NG Combustion	0.79	3.14	3.14	0.25	41.35	2.27	34.74	52,558.73	
Degreasers	-	-	-	-	-	3.52	-	-	
Fire pump engine	1.25	1.25	1.25	1.17	17.65	1.43	3.80	656.93	
Total	149.49	87.06	50.05	1.42	59.00	143.61	38.54	53,215.67	
<b>Total PTE of Entire Source</b>	<b>149.49</b>	<b>87.06</b>	<b>50.05</b>	<b>1.42</b>	<b>59.00</b>	<b>143.61</b>	<b>38.54</b>	<b>657.00</b>	
<b>Title V Major Source Thresholds</b>	<b>NA</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100,000</b>	
<b>PSD Major Source Thresholds</b>	<b>250</b>	<b>250</b>	<b>250</b>	<b>250</b>	<b>250</b>	<b>--</b>	<b>250</b>	<b>100,000</b>	
<b>Emission Offset Major Source Thresholds</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>100</b>	<b>100</b>	<b>NA</b>	<b>NA</b>	

- (a) The PTE is based on PSD Minor limits (for details, please refer 326 IAC 2-2 applicability in ' State Rule Applicability - Entire Source ' section of this TSD).

All of the remaining PTEs are uncontrolled emission rates.

- (a) This existing stationary source is not major for PSD because the emissions of each regulated pollutant, excluding GHGs, are less than two hundred fifty (<250) tons per year, and it is not in one of the twenty-eight (28) listed source categories.
- (b) This existing source is a major stationary source, under Emission Offset (326 IAC 2-3), because ozone precursors, NO<sub>x</sub> and VOC, are emitted at a rate of 100 and 25 tons per year or more, respectively.
- (c) GHG emissions are less than one hundred thousand (<100,000) tons of CO<sub>2</sub> equivalent (CO<sub>2</sub>e) emissions per year.

### Federal Rule Applicability

#### **Compliance Assurance Monitoring (CAM)**

Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to each existing pollutant-specific emission unit that meets the following criteria:

- (1) has a potential to emit before controls equal to or greater than the major source threshold for the pollutant involved;
- (2) is subject to an emission limitation or standard for that pollutant; and
- (3) uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.

#### CAM Applicability - SO<sub>2</sub>, NO<sub>x</sub>, VOC and CO

None of the emission units at this source is equipped with SO<sub>2</sub>, NO<sub>x</sub>, VOC and CO add-on controls. Therefore, CAM SO<sub>2</sub>, NO<sub>x</sub>, VOC, VOC and CO does not apply to any emission unit at this source,

#### CAM Applicability - PM, PM<sub>10</sub> and PM<sub>2.5</sub>

Shot Peeners, Grinders and Quench Tanks are equipped with particulate add-on control. Therefore, CAM PM, PM<sub>10</sub> and PM<sub>2.5</sub> has been evaluated as below.

		Control Device Used			Emission Limitation (Y/N)			Uncontrolled PTE (tons/year)			Controlled PTE (tons/year)			Major Source Threshold (tons/year)	CAM Applicable (Y/N)		
		PM	PM10	PM2.5	PM	PM10	PM2.5	PM	PM10	PM2.5	PM	PM10	PM2.5	PM/PM10/PM2.5	PM	PM10	PM2.5
Grinders	3-0244	Y	Y	Y	Y	Y	Y	>100	<100	<100	<100	<100	<100	100	Y	N	N
	3-0247	Y	Y	Y	Y	Y	Y	<100	<100	<100	<100	<100	<100	100	N	N	N
	3-0249	Y	Y	Y	Y	Y	Y	<100	<100	<100	<100	<100	<100	100	N	N	N
	3-0385	Y	Y	Y	Y	Y	Y	>100	<100	<100	<100	<100	<100	100	Y	N	N
	3-0386	Y	Y	Y	Y	Y	Y	<100	<100	<100	<100	<100	<100	100	N	N	N
	3-0389	Y	Y	Y	Y	Y	Y	<100	<100	<100	<100	<100	<100	100	N	N	N
	3-0393	Y	Y	Y	Y	Y	Y	>100	<100	<100	<100	<100	<100	100	Y	N	N
	3-0394	Y	Y	Y	Y	Y	Y	<100	<100	<100	<100	<100	<100	100	N	N	N
	3-0396	Y	Y	Y	Y	Y	Y	<100	<100	<100	<100	<100	<100	100	N	N	N
Quench Tanks	3-2821	Y	Y	Y	Y	Y	Y	>100	<100	<100	<100	<100	<100	100	Y	N	N
	3-2838A	Y	Y	Y	Y	Y	Y	>100	>100	>100	<100	<100	<100	100	Y	Y	Y
	3-2845	Y	Y	Y	Y	Y	Y	>100	>100	>100	<100	<100	<100	100	Y	Y	Y
	3-4000	Y	Y	Y	Y	Y	Y	>100	>100	>100	<100	<100	<100	100	Y	Y	Y
Paint Booth	3-2714	Y	Y	Y	Y	N	N	<100	<100	<100	<100	<100	<100	100	N	N	N
Paint Booth	3-2715	Y	Y	Y	Y	N	N	<100	<100	<100	<100	<100	<100	100	N	N	N
Shot Peeners	3-1804	Y	Y	Y	Y	Y	Y	<100	<100	<100	<100	<100	<100	100	N	N	N
	3-1821	Y	Y	Y	Y	Y	Y	<100	<100	<100	<100	<100	<100	100	N	N	N
	3-1823	Y	Y	Y	Y	Y	Y	<100	<100	<100	<100	<100	<100	100	N	N	N
	3-1824	Y	Y	Y	Y	Y	Y	>100	>100	>100	<100	<100	<100	100	Y	Y	Y
	3-1825	Y	Y	Y	Y	Y	Y	>100	>100	>100	<100	<100	<100	100	Y	Y	Y
	3-1826	Y	Y	Y	Y	Y	Y	>100	>100	>100	<100	<100	<100	100	Y	Y	Y

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are applicable as follows:

- (a) Grinders 3-0244, 3-0385, 3-0393 and 3-0397 (for PM)  
 This is a new applicable requirement.
- (b) All Quench Tanks listed above (for PM, PM10 and PM2.5)  
 This is an existing requirement.
- (c) Shot Peeners 3-1824, 3-1825 and 3-1826 (for PM, PM10 and PM2.5)  
 This is a new applicable requirement.

The Compliance Determination and Monitoring Requirements section includes a detailed description of the CAM requirements.

**National Emission Standards for Hazardous Air Pollutants (NESHAPs)**

- (a) The source-wide PTE of single HAP and combined HAPs are less than 10 and 25 tons per year, respectively. Therefore this source is an area source under NESHAP. There are no major source NESHAP (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in this permit renewal.
  
- (b) Subpart CCCCCC — National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities

A gasoline fuel transfer dispensing operation is subject to the requirements of this NESHAP because the gasoline from the storage tank is dispensed into the motor vehicle.

This gasoline fuel transfer dispensing operation was installed prior November 9, 2006, therefore, this facility is considered existing affected source. Non applicable portions of the NESHAP will not be included in the permit. The gasoline fuel transfer dispensing operation is subject to the following portions of Subpart CCCCCC for existing affected source:

- (1) 40 CFR 63.11110
- (2) 40 CFR 63.11111
- (3) 40 CFR 63.11112
- (4) 40 CFR 63.11113(b)
- (5) 40 CFR 63.11115
- (6) 40 CFR 63.11116
- (7) 40 CFR 63.11130
- (8) 40 CFR 63.11132

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

This is a new applicable requirement. This is a Title I change.

- (c) Subpart JJJJ — Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

The fire pump engine is not spark ignition engine; therefore, the requirements of this NESHAP do not apply to this engine.

- (d) Subpart ZZZZ — National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE)

The fire pump engine is subject to the requirements of this NESHAP, which are incorporated by reference as 326 IAC 20-82, because it is stationary reciprocating internal combustion engines (RICE) located at area sources of HAP emissions. Under this NESHAP, this engine is considered existing RICE as pursuant to 40 CFR 63.6590(a)(1)(iii).

Non applicable portions of the NESHAP will not be included in the permit. The fire pump engine is subject to the following portions of Subpart ZZZZ for existing affected source:

- (1) 40 CFR 63.6580
- (2) 40 CFR 63.6585(a) and (c)
- (3) 40 CFR 63.6590(a)(1)
- (4) 40 CFR 63.6595(a)(1)

- (5) 40 CFR 63.6603(a)
- (6) 40 CFR 63.6604
- (7) 40 CFR 63.6605
- (8) 40 CFR 63.6625(e)(3) and (f)
- (9) 40 CFR 63.6645(a)(5)
- (10) 40 CFR 63.6660
- (11) 40 CFR 63.6665
- (12) 40 CFR 63.6670
- (13) 40 CFR 63.6675

The provisions of 40 CFR 63 Subpart A – General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the fire pump engine except when otherwise specified in 40 CFR 63, Subpart ZZZZ.

This is a new applicable requirement. This is a Title I change.

- (e) Subpart XXXXXX — National Emission Standards for Hazardous Air Pollutants Area Source Standards for Nine Metal Fabrication and Finishing Source Categories

This type source is not described in Table 1 of this NESHAP. Therefore, this source is not subject to the requirements of this NESHAP.

- (f) Subpart HHHHHH — National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources

This source does not perform any paint stripping operation, which involves the use of chemical strippers that contain methylene chloride (MeCl). In addition, the source does not use any coating material, which contains target HAPs (compounds of chromium (Cr), lead (Pb), manganese (Mn), nickel (Ni), or cadmium (Cd)). Therefore, the requirements of this NESHAP do not apply to this source.

#### **New Source Performance Standards (NSPS)**

- (a) Subpart IIII — Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

The fire pump engine was installed prior 2006, therefore, the requirements of this NESHAP do not apply to this engine.

- (b) There are no NSPS (326 IAC 12 and 40 CFR Part 60) included in the permit due to the proposed renewal for this source.

<b>State Rule Applicability - Entire Source</b>
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#### **326 IAC 2-2 and 2-3 (PSD and Emission Offset)**

##### VOC

The source is located in Lake County which is nonattainment for ozone. The source has VOC PTE greater than 100 tons per year. Therefore, this source is now major under 326 IAC 2-3 and the existing PSD Minor Limit (which restricts source-wide VOC emissions less than 250 tons per year) will be removed through this renewal. This change is shown below. Deleted language appears as ~~strikethroughs~~.

##### D.5.2 — PSD Minor Limits [326 IAC 2-2]

~~VOC emissions shall be limited to:~~

Emission Unit	ID	VOC Limit (ton/yr)
Dip Coating	3-2813	80.81
Dip Coating	3-2865	
Dip Coating	3-2865A	
Dip Coating	3-2867	
Dip Coating	3-2870	
Dip Coating	3-2874A	
Dip Coating	3-2874B	
Dip Coating	3-2869	55.19
Dip Coating	3-2872	
Dip Coating	3-2873	

Compliance with these limits combined with the limits in Conditions D.2.3, D.3.3 and D.7.3, and the unrestricted potential to emit of VOC, PM, PM<sub>10</sub> and PM<sub>2.5</sub> from all other equipment at this source will limit the potential to emit of VOC, PM, PM<sub>10</sub> and PM<sub>2.5</sub> from the entire source to less than two hundred fifty (250) tons per year, each. Therefore the requirements of 326 IAC 2-2 (PSD) are not applicable to the entire source.

PM, PM10 and PM2.5

The uncontrolled PM, PM10 and PM2.5 emissions, each, from the source are greater than 250 tons/year. The Permittee shall continue to comply with the following limits specified in the existing permit:

Emission Unit	ID	PM Limit (lb/hr)	PM10 Limit (lb/hr)	PM2.5 Limit (lb/hr)
<b>10 Grinders</b>				
#1 Mattison (Large) Grinder	3-0244	0.99	2.085 *	0.99
Torrington Ferris Wheel Grinder	3-0247			
Gardner Paddle Wheel Grinder	3-0249			
#1 Besley Ferris Wheel Grinder	3-0385			
#2 Besley Ferris Wheel Grinder	3-0386			
Gardner Tub Grinder	3-0389			
#2 Mattison (Small) Grinder	3-0393			
Besley Swing Grinder	3-0394			
Vertical Opposing Disc Grinder	3-0396			
Vertical Opposing Disc Grinder	3-0397			
<b>4 Quench Tanks</b>				
Small Line Quench Tank	3-2821	2.97	1.05	1.05
Medium Line Quench Tank	3-2838A	2.97	2.97	2.97
Large Line Quench Tank	3-2845	2.97	1.75	1.75
Line 4 Quench Tank	3-4000	3.09	3.09	3.09
<b>6 Shot Peeners</b>				
Shot Peener	3-1804	0.99	0.06	0.06
Shot Peener	3-1821	0.99	0.06	0.06
Shot Peener	3-1823	0.99	0.06	0.06
Shot Peener	3-1824	0.99	0.99	0.99
Shot Peener	3-1825	0.99	0.99	0.99
Shot Peener	3-1826	1.03	1.03	1.03

\* This is the same limit as established under 326 IAC 6.8-2-4(a) rule (for details, please refer 326 IAC 6.8 rule applicability in 'State Rule Applicability – Entire Source ' section of this TSD). In order to streamline the PSD minor limit for these grinders, the 326 IAC 6.8-2-4(a) limit was used as the PSD minor limit. . This PM10 limit is separate from other two grinders (3-0396 and 3-0397). These 2

grinders have separate PSD minor limits, even though they all exhaust to the same control.

These are existing limits and being carried over to this renewal.

Compliance with these limits combined with the unrestricted potential to emit of PM, PM10 and PM2.5 from all other equipment at this source will limit the potential to emit of PM, PM10 and PM2.5 from the entire source to less than two hundred fifty (250) tons per year, each. Therefore the source is minor under 326 IAC 2-2 (PSD).

For clarification, the requirements specified in the permit as it relates to the PSD regulations would only apply if the source becomes a major source under the PSD regulations found at 326 IAC 2-2.

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

This source is subject to 326 IAC 2-6 (Emission Reporting) because it is located in Lake County and its emissions of VOC and NOx are greater than 25 tons per year. Therefore, pursuant to 326 IAC 2-6-3(a)(1), annual reporting is required. An emission statement shall be submitted by July 1, 2014 and every year thereafter. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

The existing Part 70 Operating Permit No. T089-23826-00204 requires Emission Reporting triennially. However, this is incorrect; therefore, this triennial Emission Reporting frequency will be changed to annual Emission Reporting frequency through this renewal.

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

This source is subject to the opacity limitations specified in 326 IAC 5-1-2(2).

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

Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions), fugitive dust shall not be visible crossing the boundary or property line of a source. Observances of visible emissions crossing property lines may be refuted by factual data expressed in 326 IAC 6-4-2(1), (2) or (3).

**326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)**

This rule does not apply to the source because the source-wide fugitive particulate emissions are less than 25 tons per year.

**326 IAC 6.8 PM Limitations for Lake County**

(a) Pursuant to 326 IAC 6.8-2-4(a), the PM10 emissions from the following facilities at this source are limited as follows:

Emission Units	PM10 Emission Limits	
	lbs/ton	lbs/hr
Stack serving the following spring grinders: 3-0244, 3-0247, 3-0249, 3-0385, 3-0386, 3-0389, 3-0393, and 3-0394	-	2.085
Small Line Coil Spring Manufacturing Process (3-2821)	-	1.05
Medium Line Coil Spring Manufacturing Process (3-2838A)	-	1.05
Large Line Coil Spring Manufacturing Process (3-2845)	-	1.75
Shot Peener (3-1804)	0.011	0.06
Shot Peener (3-1821)	0.016	0.06

Emission Units	PM10 Emission Limits	
	lbs/ton	lbs/hr
Shot Peener (3-1823)	0.016	0.06

Note: 326 IAC 6.8-2-4(a) is title for ASF-Keystone, Inc.-Hammond, but this rule still applies to source (Amsted Rail Company, Inc.) even though the name of the source has changed.

(b) Pursuant to 326 IAC 6.8-2-4(b), the following furnaces shall burn natural gas only:

Emission Unit	ID
Small Line Slot Furnace	2-5006
Medium Line Slot Furnace	2-5014
Medium Line Slot Furnace	2-5015
Large Line Bar Furnace	2-5027
Large Line Slot Furnace	2-5036
Medium Line Bar Furnace	2-5075
Small Line Bar Furnace	2-5085
Medium Line Draw Furnace	2-5097
Line 4 Coil draw furnace	2-5097A
Small Line Draw Furnace	2-5163
Large Line Draw Furnace	2-5164
Line 4 Slot Furnace	2-5201
Line 4 Slot Furnace	2-5202
Line 4 Bar Furnace	2-5203A
Line 4 Bar Furnace	2-5203B

(c) The facilities listed below are not specifically listed in 326 IAC 6.8-2 through 326 IAC 6.8-11, therefore these facilities are subject to the requirements of 326 IAC 6.8-1-2. Pursuant to 326 IAC 6.8-1-2(a), the particulate emissions from these facilities shall not exceed 0.03 grains/dscf.

Emission Unit	ID
Quench oil heaters	2-5204A
Quench oil heaters	2-5204B
Vertical Opposing Disc Grinder	3-0396
Vertical Opposing Disc Grinder	3-0397
Line 4 Coil Spring Manufacturing Process	3-4000
Shot Peener	3-1824
	3-1826
	3-1825

(d) The dip coating operations listed below are exempt from the requirements of 326 IAC 6.8 pursuant to 326 IAC 6.8-1-1(b).

Emission Unit	ID
Paint Booths and Dip Tanks	3-2813
	3-2865
	3-2865A
	3-2867
	3-2869
	3-2870

Emission Unit	ID
	3-2872
	3-2873
	3-2874A
	3-2874B

- (e) The spray coating operations listed below are exempt from the requirements of 326 IAC 6.8 pursuant to 326 IAC 6.8-1-2(h)(4) because each of these spray coating operations uses less than five (5) gallons of coating material per day.

Emission Unit	ID
Paint Spray Booth	3-2714
Paint Spray Booth	3-2715

Pursuant to 326 IAC 6.8-1-2(h), the Permittee shall install and operate particulate control device on Paint Spray Booths 3-2714 and 3-2715, if a coating application rate at these booths increases to greater than five (5) gallons per day.

**326 IAC 6.8-8-1 (Lake County: Continuous Compliance Plan)**

- (a) Pursuant to 326 IAC 6.8-8-1, the Permittee shall submit to IDEM and maintain at source a copy of the Continuous Compliance Plan (CCP). The Permittee shall perform the inspections, monitoring and record keeping in accordance with the information in 326 IAC 6.8-8-5 through 326 IAC 6.8-8-7 or applicable procedures in the CCP.
- (b) Pursuant to 326 IAC 6.8-8-8, the Permittee shall update the CCP, as needed, retain a copy of any changes and updates to the CCP at the source and make the updated CCP available for inspection by the department. The Permittee shall submit the updated CCP, if required to IDEM, OAQ within thirty (30) days of the update.
- (c) Pursuant to 326 IAC 6.8-8, failure to submit a CCP, maintain all information required by the CCP at the source, or submit update to a CCP is a violation of 326 IAC 6.8-8.

**326 IAC 6.8-10 (Compliance Requirements: Control Plans)**

This source is subject to 326 IAC 6.8-10 because it has potential to emit 5 tons per year of fugitive particulate matter. The Permittee shall comply with the particulate emission limitations specified in 326 IAC 6.8-10-3 (Lake County Fugitive Particulate Matter Control Requirements) for all of these facilities, using the revised fugitive dust control plan (FDCP) submitted on March 24, 2014 (See Attachment A).

The following requirements of 326 IAC 6.8-10-3 do not apply to the source because the source does not have the type of facilities in these requirements:

- (1) The opacity of fugitive particulate emissions from continuous transfer of material onto and out of storage piles shall not exceed ten percent (10%) on a three (3) minute average.
- (2) The opacity of fugitive particulate emissions from storage piles shall not exceed ten percent (10%) on a six (6) minute average.
- (3) There shall be a zero (0) percent frequency of visible emission observations of a material during the inplant transportation of material by truck or rail at any time.
- (4) The opacity of fugitive particulate emissions from the inplant transportation of material by front end loaders and skip hoists shall not exceed ten percent (10%).
- (5) Material processing facilities:

- (a) The opacity of fugitive particulate emissions from the material processing facilities, except a crusher at which a capture system is not used, shall not exceed ten percent (10%) opacity.
- (b) The opacity of fugitive particulate emissions from a crusher at which a capture system is not used shall not exceed fifteen percent (15%).
- (6) Slag and kish handling activities at integrated iron and steel plants shall comply with the following particulate emissions limits:
  - (a) The opacity of fugitive particulate emissions from transfer from pots and trucks into pits shall not exceed twenty percent (20%) on a six (6) minute average.
  - (b) The opacity of fugitive particulate emissions from transfer from pits into front end loaders and from transfer from front end loaders into trucks shall comply with the fugitive particulate emission limits in 326 IAC 6.8-10-3(9).

**326 IAC 6.8-11-1 (Lake County: Particulate Matter Contingency Measures)**

The source is subject to 326 IAC 6.8-11 (Lake County Particulate Matter Contingency Measures), because the source has potential PM10 emissions equal to or greater than ten (10) tons per year. Pursuant to this rule, the source shall comply with the requirements of 326 IAC 6.8-11-4 and 326 IAC 6.8-11-6.

**State Rule Applicability – Individual Facilities**

**326 IAC 8-1-6 (New Facilities, General Reduction Requirements)**

The uncontrolled VOC potential emissions from the facilities listed below, each is constructed prior to 1980, are less than 25 tons per year. Therefore these emission units are not subject to the requirements of this rule. There are no other rules in 326 IAC 8 applicable to these emission units.

Emission Unit	ID
Small Line Slot Furnace	2-5006
Medium Line Slot Furnace	2-5014
Medium Line Slot Furnace	2-5015
Large Line Bar Furnace	2-5027
Large Line Slot Furnace	2-5036
Medium Line Bar Furnace	2-5075
Small Line Bar Furnace	2-5085
Medium Line Draw	2-5097
Line 4 Coil draw furnace	2-5097A
Small Line Draw Furnace	2-5163
Large Line Draw Furnace	2-5164
Line 4 Slot Furnace	2-5201
Line 4 Slot Furnace	2-5202
Line 4 Bar Furnace	2-5203A
Line 4 Bar Furnace	2-5203B
Quench oil heaters	2-5204A
Quench oil heaters	2-5204B
Paint Spray Booth	3-2714
Paint Booth	3-2715
Small Line Coil Spring Manufacturing Process	3-2821
Medium Line Coil Spring Manufacturing Process	3-2838A

Emission Unit	ID
Large Line Coil Spring Manufacturing Process	3-2845
Line 4 Coil Spring Manufacturing Process	3-4000

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

The Surface coating operations listed below are subject to 326 IAC 8-2-9 because these surface coating operations are located in Lake County, have actual VOC emissions greater than fifteen (15) pounds per day and used for coating metal parts under the Standard Industrial Classification Code of major groups #34.

Note: Although the Paint Spray Booths 3-2715 and 3-2714, each, currently has potential VOC emissions less than 15 pound per day (or can take an enforceable limit to restrict potential VOC emissions less than 15 pound per day with associated record keeping and reporting requirements), these facilities will remain subject to this rule pursuant to 326 IAC 8-1-1(a) (once in always in).

Emission Unit	ID
Paint Spray Booth	3-2714
Paint Spray Booth	3-2715
Dip tanks	3-2813
	3-2865
	3-2865A
	3-2867
	3-2869
	3-2870
	3-2872
	3-2873
	3-2874A
	3-2874B

- (a) Pursuant to 326 IAC 8-2-9(d)(1)(A), the VOC content of the coating delivered to the applicator shall be limited to 2.8 pounds of VOCs per gallon of coating less water, for Air Dried coatings.

Based on the MSDS submitted by the source and calculations made, the Permittee can comply with this requirement using compliant coatings option.

The Permittee is using compliant coatings for all of the above listed coating operations to comply with this requirement. The existing permit specifies Daily volume weighted average option to comply with this requirement. The Permittee has requested IDEM to include compliant coating option and keep the Daily volume weighted average option in the permit. Therefore, compliant coating and Daily volume weighted average, both options, will be included in this renewal.

- (b) Pursuant to 326 IAC 8-2-9(d)(2), one (1) or a combination of the following equipment shall be used for coating application:
  - (A) Electrostatic equipment.
  - (B) High volume low-pressure (HVLP) spray equipment.
  - (C) Flow coating.
  - (D) Roller coating.
  - (E) Dip coating, including electrodeposition.
  - (F) Airless spray.
  - (G) Air-assisted airless spray.

- (H) Other coating application method capable of achieving a transfer efficiency equivalent or better than achieved by HVLP spraying.

The Permittee uses airless or air atomization spray guns. Therefore, the Permittee can comply with the requirements of 326 IAC 8-2-9(d)(2).

- (c) Pursuant to 326 IAC 8-2-9(f), the work practices shall include, but not be limited to, the following:
  - (1) Store all VOC containing coatings, thinners, coating related waste, and cleaning materials in closed containers.
  - (2) Ensure that mixing and storage containers used for VOC containing coatings, thinners, coating related waste, and cleaning materials are kept closed at all times except when depositing or removing these materials.
  - (3) Minimize spills of VOC containing coatings, thinners, coating related waste, and cleaning materials.
  - (4) Convey VOC containing coatings, thinners, coating related waste, and cleaning materials from one (1) location to another in closed containers or pipes.
  - (5) Minimize VOC emissions from the cleaning of application, storage, mixing, and conveying equipment by ensuring that equipment cleaning is performed without atomizing the cleaning solvent and all spent solvent is captured in closed containers.

### **326 IAC 8-3 (Organic Solvent Degreasing Operations)**

The Degreasing operations are subject to the requirements of 326 IAC 8-3-2 (Cold cleaner degreaser control equipment and operating requirements) as pursuant to 326 IAC 8-3-1(a)(1) and 326 IAC 8-3-8 as pursuant to 326 IAC 8-3-1(a)(1) because these Degreasing operations are using solvents which contain VOC and located in Lake County.

The Degreasing operations are not heated, agitated and spray solvents, therefore, the requirements of 326 IAC 8-3-2(b) do not apply to these Degreasing operations.

The source does not sell solvents, therefore, the requirements of 326 IAC 8-3-2(c)(1) and 326 IAC 8-3-2(d)(1) do not apply to these Degreasing operations.

- (a) Pursuant to 326 IAC 8-3-2(a), Permittee shall comply with the following:
  - (1) Equip the degreaser with a cover.
  - (2) Equip the degreaser with a device for draining cleaned parts.
  - (3) Close the degreaser cover whenever parts are not being handled in the degreaser.
  - (4) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases.
  - (5) Provide a permanent, conspicuous label that lists the operating requirements in items (3), (4), (6), and (7).
  - (6) Store waste solvent only in closed containers.
  - (7) Prohibit the disposal or transfer of waste solvent in such a manner that could allow greater than twenty percent (20%) of the waste solvent (by weight) to evaporate into the atmosphere.
- (b) Pursuant to 326 IAC 8-3-8(b), Permittee shall not shall operate a cold cleaner degreaser with a solvent that has a VOC composite partial vapor pressure that exceeds one (1) millimeter of mercury (nineteen-thousandths (0.019) pound per square inch) measured at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).
- (c) Pursuant to 326 IAC 8-3-8(c), Permittee shall maintain each of the following records for each solvent purchase:

- (A) The name and address of the solvent supplier.
  - (B) The date of purchase (or invoice/bill date of contract servicer indicating service date).
  - (C) The type of solvent purchased.
  - (D) The total volume of the solvent purchased.
  - (E) The true vapor pressure of the solvent measured in millimeters of mercury at twenty (20) degrees Celsius (sixtyeight (68) degrees Fahrenheit).
- (d) Pursuant to 326 IAC 8-3-8(d), all the records specified in paragraph (c) above shall be retained on-site or accessible electronically from the site for the most recent three (3) year period, and reasonably accessible for an additional two (2) year period.

**326 IAC 2-4.1 (New Source Toxics Control)**

None of the facilities at this source has single HAP and combined HAPs PTE greater than 10 and 25 tons per year, respectively. Therefore, 326 IAC 2-4.1 does not apply.

Note: The structures of D sections in the permit have been rearranged to put emissions units with overlapping limits in one section.

<b>Compliance Determination and Monitoring Requirements</b>
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Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a continuous demonstration. When this occurs, IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, Compliance Determination Requirements are included in the permit. The Compliance Determination Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

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

**Compliance Determination Requirements**

- (a) In order comply with 326 IAC 2-2 and 326 IAC 6.8 limits specified in 'State Rule Applicability - Entire Source' section of this TSD, the controls listed in the table below shall be in operation and control particulate emissions when one or more of the associated emission unit to these controls is in operation.

Control Device	Emission Unit	Associated Emission Unit
BH 3-3037*	Grinders	3-0244
		3-0247
		3-0249
		3-0385
		3-0386
		3-0389
		3-0393
		3-0394
		3-0396
		3-0397
oil smoke filter	Quench Tank	3-2821
oil smoke filter (33027A)	Quench Tank	3-2838A
oil smoke filter (3-4001)	Quench Tank	3-4000
BH 3-3017*	Shot Peener	3-1804
BH 3-3022*	Shot Peener	3-1821
BH 3-1823*	Shot Peener	3-1823
BH 3-3024*	Shot Peener	3-1824
BH 3-3025*	Shot Peener	3-1825
BH 3-1826A*	Shot Peener	3-1826

\* The source has requested IDEM to include an option in the permit by which it does not have to report IDEM when a bag failure is observed in a multi-compartment baghouse, if the following requirements are satisfied:

- (a) The failed bag in the multi-compartment baghouse can be isolated.
- (b) A testing has confirmed that the compliance can be achieved without the failed bag.

IDEM has determined that the notification is not needed if the testing can demonstrate that the source can comply with the limits with one bag down. Therefore, this option will be added in the permit. The actual language added to the permit is as follows:

If the failed compartment can be isolated and testing has confirmed that compliance can be achieved with one compartment down, this notification is not required.

Note: This has been approved by Jarrod Fisher of Office of Air Quality.

- (b) Compliant coating and Daily volume weighted average options  
 In order comply with 326 IAC 8-2-9 (Miscellaneous Metal Coating), VOC limit specified in 'State Rule Applicability – Individual Facilities' section of this TSD, the VOC content and usage 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 "as supplied" and "as applied" VOC data sheets when Compliant coating and Daily volume weighted average options are used. IDEM, OAQ reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.
- (c) For Daily volume weighted average option  
 In order comply with 326 IAC 8-2-9 (Miscellaneous Metal Coating) VOC limit specified in 'State Rule Applicability – Individual Facilities' section of this TSD, the VOC content shall be determined pursuant to 326 IAC 8-1-2(a)(7), using a volume weighted average of coatings on a daily basis when Daily volume weighted average options is used. This volume weighted average shall be determined by the following equation:

$$A = [ \sum (c \times U) / \sum U ]$$

Where:

A is the volume weighted average in pounds VOC per gallon less water as applied;

C is the VOC content of the coating in pounds VOC per gallon less water as applied; and

U is the usage rate of the coating in gallons per day.

- (d) The Compliance Method specified under 326 IAC 8-1-2(a)(9) cannot be used for the dip coating operation because the VOC limit of 2.8 pounds of VOC per gallon of coating, excluding water is not one of the listed limits with the equivalent VOC per gallon solids deposited as shown below:

326 IAC 8-1-2(a)(9) is applicable only to dip coating or flow coating operations at miscellaneous metal coating operations subject to 326 IAC 8-2-9 as follows for dip coating or flow coating operations only.

The equivalent emission limits in lb/gallon of coating solids are as follows:

Miscellaneous metal coating category	Limit in lb/gallon of coating less water	Equivalent emission limit in lb/gallon of coating solids
Clear coatings	4.3	10.2
Air dried or forced warm air dried at temperatures up to 194 degrees F	3.5	6.7
Extreme performance coatings	3.5	6.7
All other coatings and coating application systems	3.0	5.1

**Testing Requirements**

Emission Unit	unit ID	Control Device	Timeframe for Testing	Pollutant *	most recent test date
Grinders	3-0244	BH 3-3037***	no later than 5 years after the most recent test	PM, PM10 and PM2.5	6/24/2011
	3-0247				
	3-0249				
	3-0385				
	3-0386				
	3-0389				
	3-0393				
	3-0394				
	3-0396				
3-0397					
Small Line Quench Tank	3-2821	oil smoke filter	no later than 5 years after the most recent test	PM, PM10 and PM2.5	12/12/2012
Medium Line Quench Tank	3-2838A	oil smoke filter (3-3027A)	no later than 5 years after the most recent test	PM, PM10 and PM2.5	1/20/2012
Large Line Quench Tank	3-2845	oil smoke filter (3-3036)	no later than 180 days after the issuance of this renewal **	PM, PM10 and PM2.5	not performed
Line 4 quench tank	3-4000	oil smoke filter (3-4001)	no later than 5 years after the most recent test	PM, PM10 and PM2.5	11/26/2013
Shot Peeners	3-1804	BH 3-3017	shall be performed on two (2) of the Shot Peeners no later than no later than five (5) years of the most recent testing performed on Shot Peener 3-1824 and shall be repeated every five (5) years on two (2) Shot Peeners such that the time period between tests on each unit does not exceed fifteen (15) years	PM, PM10 and PM2.5	1/20/2012 for 3-1824  November 2013 for 3-1804
	3-1821	BH 3-3022			
	3-1823	BH 3-1823			
	3-1824	BH 3-3024			
	3-1825	BH 3-3025			
	3-1826	BH 3-1826A			
Shot Peener	3-1826	BH 3-1826A	within sixty (60) days of reaching maximum capacity but no later than one hundred and eighty (180) days after initial startup	PM, PM10 and PM2.5	not performed

\* PM10 and PM2.5 includes filterable and condensable PM.

\*\* The Large Line Quench Tank was controlled by either electrostatic precipitator or oil smoke filter (3-3036). The previous test was performed for the electrostatic precipitator. However, this electrostatic precipitator has been removed. No test has been performed for Large Line Quench Tank when using the oil smoke filter (3-3036); therefore, a new testing requirement has been added for the Large Line Quench Tank using oil smoke filter (3-3036). This will be required within 180 days from the issuance of this permit. This is a new testing requirement. This test shall be repeated every five years every five (5) years from the date of the most recent valid compliance demonstration.

\*\*\* The Permittee has an option to comply with the testing requirements concurrently through one compliance test for the baghouse (3-3037).

### Compliance Monitoring Requirements

Emission Unit	Emission ID	Control	Parameter	Frequency
Grinders	3-0244	BH 3-3037	Visible Emissions & Pressure Drop	Daily
	3-0247			
	3-0249			
	3-0385			
	3-0386			
	3-0389			
	3-0393			
	3-0394			
	3-0396			
3-0397				
Small Line Quench Tank	3-2821	oil smoke filter	filter inspection*	each calendar quarter
Medium Line Quench Tank	3-2838A	oil smoke filter (3-3027A)	filter inspection*	each calendar quarter
Large Line Quench Tank	3-2845	oil smoke filter (3-3036)	filter inspection*	each calendar quarter
Line 4 quench tank	3-4000	oil smoke filter (3-4001)	filter inspection*	each calendar quarter
Shot Peeners **	3-1804	BH 3-3017	Visible Emissions	Daily
	3-1821	BH 3-3022	Visible Emissions	Daily
	3-1823	BH 3-1823	Visible Emissions	Daily
	3-1824	BH 3-3024	Visible Emissions	Daily
	3-1825	BH 3-3025	Visible Emissions	Daily
	3-1826	BH 3-1826A	Visible Emissions	Daily

\* The oil smoke filters are not baghouses, therefore, Pressure Drop parametric monitoring has not been included for any smoke filters. The quench tanks are venting inside therefore Visible Emissions monitoring requirement has not been included for any smoke filter.

Filter inspection is a new monitoring requirement for the oil smoke filters. This monitoring requirement has been included in this renewal to ensure that the filters are routinely checked for its breakdown or failure.

\*\* The source requested IDEM that Visible Emissions monitoring is adequate compliance monitoring for the Shot Peeners baghouses because the source has historically performed visible emissions notations for the Shot Peeners baghouses and observed typically no visible emissions. IDEM determined during the SPM No. 089-31498-00204, issued on July 24, 2012 that visible emissions notation monitoring is adequate compliance monitoring for the Shot Peeners baghouses because the Shot Peeners are not large units and a failure would be immediately obvious. Therefore, pressure drop monitoring requirement has not been included for the Shot Peeners baghouses.

These monitoring conditions are necessary because the filters must operate properly to ensure compliance with 326 IAC 6.8, 326 IAC 2-2. CAM and 326 IAC 2-7.

### Recommendation

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

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

An application for the purposes of this review was received on May 8, 2013. Additional information was received on (date).

<b>Conclusion</b>
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The operation of this a stationary steel coil spring manufacturing plant shall be subject to the conditions of the attached Part 70 Operating Permit Renewal No. 089-33178-00204.

<b>IDEM Contact</b>
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- (a) Questions regarding this proposed permit can be directed to Mehul Sura at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 233-6868 or toll free at 1-800-451-6027 extension 3-6868.
- (b) A copy of the findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: [www.idem.in.gov](http://www.idem.in.gov)

**Appendix A: Emission Calculations  
Emission Summary**

**Company Name:** Amsted Rail Company, Inc.  
**Address City IN Zip:** 4831 Holman Avenue, Hammond, Indiana 46327  
**Permit Number:** 089-33178-00204  
**Reviewer:** Mehul Sura  
**Date:** 12/20/2013

**Uncontrolled Emissions (tons/yr)**

	ID	PM	PM10	PM2.5	SO2	NOx	VOC	CO	CO2e	single HAP (Chromium)	combined HAPs
Grinders	3-0244	160.09	16.01	16.01	-	-	-	-	-	-	-
	3-0247	67.76	6.78	6.78	-	-	-	-	-	-	-
	3-0249	11.17	1.12	1.12	-	-	-	-	-	-	-
	3-0385	115.41	11.54	11.54	-	-	-	-	-	-	-
	3-0386	82.65	8.27	8.27	-	-	-	-	-	-	-
	3-0389	40.95	4.10	4.10	-	-	-	-	-	-	-
	3-0393	160.09	16.01	16.01	-	-	-	-	-	-	-
	3-0394	26.06	2.61	2.61	-	-	-	-	-	-	-
	3-0396	82.65	8.27	8.27	-	-	-	-	-	-	-
3-0397	115.41	11.54	11.54	-	-	-	-	-	-	-	
Quench Tanks	3-2821	45.99	45.99	45.99	-	-	3.07	-	-	-	-
	3-2838A	153.30	153.30	153.30	-	-	3.07	-	-	-	-
	3-2845	153.30	153.30	153.30	-	-	3.07	-	-	-	-
3-4000	160.97	160.97	160.97	-	-	3.07	-	-	-	-	
Paint Booths and Dip Tanks	3-2714	0.35	0.35	0.35	-	-	0.75	-	-	-	0.83
	3-2715	0.59	0.59	0.59	-	-	1.25	-	-	-	1.41
	3-2813	-	-	-	-	-	13.26	-	-	-	-
	3-2865	-	-	-	-	-	13.26	-	-	-	-
	3-2865A	-	-	-	-	-	13.26	-	-	-	-
	3-2867	-	-	-	-	-	13.26	-	-	-	-
	3-2870	-	-	-	-	-	13.26	-	-	-	-
	3-2874A	-	-	-	-	-	13.26	-	-	-	-
	3-2874B	-	-	-	-	-	13.26	-	-	-	-
	3-2869	-	-	-	-	-	9.78	-	-	-	-
3-2872	-	-	-	-	-	9.78	-	-	-	-	
3-2873	-	-	-	-	-	9.78	-	-	-	-	
Shot Peeners	3-1804	0.42	0.36	0.36	-	-	-	-	-	0.005	0.009
	3-1821	4.20	2.94	2.94	-	-	-	-	-	0.046	0.088
	3-1823	7.36	5.15	5.15	-	-	-	-	-	0.081	0.15
	3-1824	180.46	126.32	126.32	-	-	-	-	-	1.985	3.79
	3-1825	180.46	126.32	126.32	-	-	-	-	-	1.985	3.79
	3-1826	183.96	128.77	128.77	-	-	-	-	-	2.024	3.86
Natural Gas Combustion	0.79	3.14	3.14	0.25	41.35	2.27	34.74	52559	-	0.78	
Degreasers	-	-	-	-	-	-	3.52	-	-	-	-
Fire pump engine	1.25	1.25	1.25	1.17	17.65	1.43	3.80	657	-	1.54E-02	-
<b>Total</b>		<b>1935.63</b>	<b>994.98</b>	<b>994.98</b>	<b>1.42</b>	<b>59.00</b>	<b>143.61</b>	<b>38.54</b>	<b>53215.67</b>	<b>6.13</b>	<b>14.74</b>

**Potential To Emit (tons/year)**

	ID	PM	PM10	PM2.5	SO2	NOx	VOC	CO	CO2e	single HAP (Chromium)	combined HAPs	
Grinders	3-0244	67.76 (a)	9.13 (a)	4.34 (a)	-	-	-	-	-	-	-	
	3-0247				-	-	-	-	-	-	-	
	3-0249				-	-	-	-	-	-	-	-
	3-0385				-	-	-	-	-	-	-	-
	3-0386				-	-	-	-	-	-	-	-
	3-0389				-	-	-	-	-	-	-	-
	3-0393				-	-	-	-	-	-	-	-
	3-0394				-	-	-	-	-	-	-	-
	3-0396				-	-	8.28 (a)	-	-	-	-	-
3-0397	-	-	11.54 (a)	-	-	-	-	-	-			
Quench Tanks	3-2821	13.01 (a)	4.60 (a)	4.60 (a)	-	-	3.07	-	-	-	-	
	3-2838A	13.01 (a)	13.01 (a)	13.01 (a)	-	-	3.07	-	-	-	-	
	3-2845	13.01 (a)	7.67 (a)	7.67 (a)	-	-	3.07	-	-	-	-	
	3-4000	13.53 (a)	13.53 (a)	13.53 (a)	-	-	3.07	-	-	-	-	
Paint Booths and Dip Tanks	3-2714	0.35	0.35	0.35	-	-	0.75	-	-	-	0.83	
	3-2715	0.59	0.59	0.59	-	-	1.25	-	-	-	1.41	
	3-2813	-	-	-	-	-	13.26	-	-	-	-	
	3-2865	-	-	-	-	-	13.26	-	-	-	-	
	3-2865A	-	-	-	-	-	13.26	-	-	-	-	
	3-2867	-	-	-	-	-	13.26	-	-	-	-	
	3-2870	-	-	-	-	-	13.26	-	-	-	-	
	3-2874A	-	-	-	-	-	13.26	-	-	-	-	
	3-2874B	-	-	-	-	-	13.26	-	-	-	-	
	3-2869	-	-	-	-	-	9.78	-	-	-	-	
3-2872	-	-	-	-	-	9.78	-	-	-	-		
3-2873	-	-	-	-	-	9.78	-	-	-	-		
Shot Peeners	3-1804	4.34 (a)	0.26 (a)	0.26 (a)	-	-	-	-	-	0.043	0.048	
	3-1821	4.34 (a)	0.26 (a)	0.26 (a)	-	-	-	-	-	0.043	0.048	
	3-1823	4.34 (a)	0.26 (a)	0.26 (a)	-	-	-	-	-	0.043	0.048	
	3-1824	4.34 (a)	4.34 (a)	0.26 (a)	-	-	-	-	-	0.043	0.048	
	3-1825	4.34 (a)	4.34 (a)	0.26 (a)	-	-	-	-	-	0.043	0.048	
	3-1826	4.51 (a)	4.51 (a)	0.26 (a)	-	-	-	-	-	0.045	0.050	
Natural Gas Combustion	0.79	3.14	3.14	0.25	41.35	2.27	34.74	52558.73	-	0.78		
Degreasers	-	-	-	-	-	-	3.52	-	-	-	-	
Fire pump engine	1.25	1.25	1.25	1.17	17.65	1.43	3.80	656.93	-	0.02	-	
<b>Total</b>		<b>149.49</b>	<b>87.06</b>	<b>50.05</b>	<b>1.42</b>	<b>59.00</b>	<b>143.61</b>	<b>38.54</b>	<b>53215.67</b>	<b>0.26</b>	<b>3.33</b>	

(a) PTE is based on PSD Minor Limit.

Natural gas combustion emissions includes combustion emissions from furnaces. There are no process emissions from the furnaces located at the source.

Appendix A: Emission Calculations  
Degreaser and Shot Peeners

Company Name: Amsted Rail Company, Inc.  
Address City IN Zip: 4831 Holman Avenue, Hammond, Indiana 46327  
Permit Number: 089-33178-00204  
Reviewer: Mehul Sura  
Date: 12/20/2013

**Degreasers**

Solvent Used: Safety-Kleen Premium Solvent/Safety-Kleen Premium Gold Solvent

Each Degreaser

POLLUTANT	Solvent Density (lbs/gal)	Usage for one Degreaser (gal/hr)	Potential Emissions from one Degreaser (lbs/hr)	Potential Emissions from one Degreaser (lbs/day)	Potential Emissions from one Degreaser (tons/yr)	Potential Emissions two Degreasers (tons/yr)
VOC	6.70	0.06	0.40	9.65	1.76	3.52
HAPs	0	0	0.00	0.00	0.00	0.00

Methodology

Potential Emissions from one Degreaser (lbs/hr) = Solvent Density (lbs/gal) x Usage (gal/hr)

Potential Emissions from one Degreaser (lbs/day) = Potential Emissions (lbs/hr) x 24 (hrs/day)

Potential Emissions from one Degreaser (tons/yr) = Potential Emissions (lbs/day) x 365 (days/yr)

Potential Emissions from two Degreasers (tons/yr) = Potential Emissions from one Degreaser (tons/yr) x 2 (Number of Degreasers)

**6 Shot Peeners**

Unit ID	Steel shots usage (tons/hr)	Steel shots usage (lb/hr)	Emission Factor				Potential to Emit (tons/yr)					PSD Minor Limit (lb/hr)			PSD Minor Limited PTE (tons/yr)				
			lb PM/lb steel shots	lb PM10/lb PM	Chromium (Cr) Content in steel shots	Manganese (Mn) Content in steel shots	PM	PM10	PM2.5	Cr	Mn	PM	PM10	PM2.5	PM	PM10	PM2.5	Cr	Mn
3-1804	0.012	24	0.004	0.86	1%	1.10%	0.42	0.36	0.36	0.0042	0.005	0.990	0.060	0.060	4.34	0.26	0.26	0.0434	0.0477
3-1821	0.12	240	0.004	0.70	1%	1.10%	4.20	2.94	2.94	0.0420	0.046	0.990	0.060	0.060	4.34	0.26	0.26	0.0434	0.0477
3-1823	0.21	420	0.004	0.70	1%	1.10%	7.36	5.15	5.15	0.0736	0.081	0.990	0.060	0.060	4.34	0.26	0.26	0.0434	0.0477
3-1824	5.15	10300	0.004	0.70	1%	1.10%	180.46	126.32	126.32	1.8046	1.985	0.990	0.060	0.060	4.34	4.34	0.26	0.0434	0.0477
3-1825	5.15	10300	0.004	0.70	1%	1.10%	180.46	126.32	126.32	1.8046	1.985	0.990	0.990	0.060	4.34	4.34	0.26	0.0434	0.0477
3-1826	5.25	10500	0.004	0.70	1%	1.10%	183.96	128.77	128.77	1.8396	2.024	1.030	1.030	0.060	4.51	4.51	0.26	0.0451	0.0496
							557	390	390	6	6				26.19	13.97	1.58	0.26	0.29

Methodology

PM and PM10 Emission Factors from STAPPA/ALAPCO "Air Quality Permits", Vol. I, Section 3 "Abrasive Blasting" (1991 edition)

PM2.5=PM10

Chromium and Manganese content in steel shots are provided by the source.

Steel shots usage (lb/hr) = steel shots usage (tons/hr) x 1/2000 (lbs/ton)

PM PTE (tons/yr) = steel shots usage (lb/hr) x lb PM / lb steel shots x 8760 (hrs/yr) / 2000 (lbs/ton)

PM10 PTE (tons/yr) = steel shots usage (lb/hr) x lb PM / lb steel shots x lb PM10 / lb PM x 8760 (hrs/yr) / 2000 (lbs/ton)

PM2.5 PTE (tons/yr) = PM10 Potential Emissions (tons/yr)

Chromium Potential Emissions (tons/yr) = PM Potential Emissions (tons/yr) x Chromium Content in steel shots

Manganese Potential Emissions (tons/yr) = PM Potential Emissions (tons/yr) x Manganese Content in steel shots

Particulate Limited PTE (tons/yr) = PSD Minor Limit (lb/hr) x 8760 (hrs/yr) / 2000 (lbs/ton)

HAP Limited PTE (tons/yr) = PM Limited PTE (tons/yr) x HAP Content in steel shots

**10 Grinders**

Unit ID	Throughput Rate (tons/hr)	BH Control Efficiency	Emission Factor (lb/ton steel)			PSD Minor Limit (lb/hr)			Potential Emissions (tons/yr)			PSD Minor Limited PTE (tons/yr)		
			PM	PM10	PM2.5	PM	PM10	PM2.5	PM	PM10	PM2.5	PM	PM10	PM2.5
3-0244	2.15	99%	17	1.7	1.7	0.990	2.085	0.990	160.09	16.01	16.01	4.34	9.13	4.34
3-0247	0.91	99%	17	1.7	1.7				67.76	6.78	6.78			
3-0249	0.15	99%	17	1.7	1.7				11.17	1.12	1.12			
3-0385	1.55	99%	17	1.7	1.7				115.41	11.54	11.54			
3-0386	1.11	99%	17	1.7	1.7				82.65	8.27	8.27			
3-0389	0.55	99%	17	1.7	1.7				40.95	4.10	4.10			
3-0393	2.15	99%	17	1.7	1.7				160.09	16.01	16.01			
3-0394	0.35	99%	17	1.7	1.7				26.06	2.61	2.61			
3-0396	1.11	99%	17	1.7	1.7				82.65	8.27	8.27			
3-0397	1.55	99%	17	1.7	1.7				115.41	11.54	11.54			

Methodology

Emission factors are from AP-42 Chapter 12.10, Gray Iron Foundries, Table 12.10-7, May 2003.

Potential Emissions (tons/yr) = Emission Factor (lb/ton steel) x Throughput Rate (tons/hr) x 8760 (hrs/yr) / 2000 (lbs/ton)

Limited PTE (tons/yr) = PSD Minor Limit (lb/hr) x 8760 (hrs/yr) / 2000 (lbs/ton)

Company Name: Amsted Rail Company, Inc.  
Address City IN Zip: 4831 Holman Avenue, Hammond, Indiana 46327  
Permit Number: 089-33178-00204  
Reviewer: Mehul Sura

4 Quench Tanks

Unit ID	Unit	Throughput Rate (tons/hr)	Emission Factor (lb/ton steel)				Emission Factor (lb/hr)	PSD Minor Limit (lb/hr)				Potential Emissions (tons/yr)				Limited PTE (tons/yr)			
			PM	PM <sub>10</sub>	PM <sub>2.5</sub>	VOC		PM	PM <sub>10</sub>	PM <sub>2.5</sub>	VOC	PM	PM <sub>10</sub>	PM <sub>2.5</sub>	VOC	PM	PM <sub>10</sub>	PM <sub>2.5</sub>	VOC
3-2821	Small Line Quench Tank	1.5	7.0	7.0	7.0	0.7	2.970	1.050	1.050	--	45.99	45.99	45.99	3.07	13.01	4.60	4.60	3.07	
3-2838A	Medium Line Quench Tank	5	7.0	7.0	7.0	0.7	2.970	2.970	2.970	--	153.30	153.30	153.30	3.07	13.01	13.01	13.01	3.07	
3-2845	Large Line Quench Tank	5	7.0	7.0	7.0	0.7	2.970	1.750	1.750	--	153.30	153.30	153.30	3.07	13.01	7.67	7.67	3.07	
3-4000	Line 4 Quench Tank	5.25	7.0	7.0	7.0	0.7	3.090	3.090	3.090	--	160.97	160.97	160.97	3.07	13.53	13.53	13.53	3.07	

PM<sub>10</sub>/PM<sub>2.5</sub> emission factors provided by the source are based on mass balance of the amount of oil used and the weight of units treated. These emission factors were used in SSM 089-31440-00204, issued for this source on July 2, 2012.

VOC emission factor is from compliance test performed for Medium Line Coil Spring Manufacturing Process on January 13, 2012.

Potential PM/PM<sub>10</sub>/PM<sub>2.5</sub> Emissions (tons/yr) = Throughput Rate (tons/hr) x Emission Factor (lb/ton steel) x 8760 (hrs/yr) / 2000 (lbs/ton)

Potential VOC Emissions (tons/yr) = Emission Factor (lb/hr) x 8760 (hrs/yr) / 2000 (lbs/ton)

Limited PM/PM<sub>10</sub>/PM<sub>2.5</sub> PTE (tons/yr) = PM/PM<sub>10</sub>/PM<sub>2.5</sub> PSD Minor Limit (lb/hr) x 8760 (hrs/yr) / 2000 (lbs/ton)

Limited VOC PTE (tons/yr) = Potential VOC Emissions (tons/yr)

Paint Booths and Dip Tanks - PM and VOC

Unit ID	Process	Material	Density (Lb/Gal)	Weight % Volatile (H <sub>2</sub> O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	usage (gal/hr)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency	
3-2714	Paint Spray Booth	Aquacron 880	9.2	71.45%	41.1%	30.4%	0.0%	28.55%	0.061	2.79	2.79	0.17	4.09	0.75	0.35	9.78	50%	
3-2715	Paint Spray Booth	Aquacron 880	9.2	71.45%	41.1%	30.4%	0.0%	28.55%	0.102	2.79	2.79	0.28	6.84	1.25	0.59	9.78	50%	
3-2813	Dip Coating	W9012A Clear Co	8.6	69.81%	68.1%	1.7%	69.9%	28.23%	6.100	0.50	0.15	0.91	72.64	13.26	0.00	0.53	100%	
3-2865	Dip Coating	W9012A Clear Co	8.6	69.81%	68.1%	1.7%	69.9%	28.23%	6.100	0.50	0.15	0.91	72.64	13.26	0.00	0.53	100%	
3-2865A	Dip Coating	W9012A Clear Co	8.6	69.81%	68.1%	1.7%	69.9%	28.23%	6.100	0.50	0.15	0.91	72.64	13.26	0.00	0.53	100%	
3-2867	Dip Coating	W9012A Clear Co	8.6	69.81%	68.1%	1.7%	69.9%	28.23%	6.100	0.50	0.15	0.91	72.64	13.26	0.00	0.53	100%	
3-2870	Dip Coating	W9012A Clear Co	8.6	69.81%	68.1%	1.7%	69.9%	28.23%	6.100	0.50	0.15	0.91	72.64	13.26	0.00	0.53	100%	
3-2874A	Dip Coating	W9012A Clear Co	8.6	69.81%	68.1%	1.7%	69.9%	28.23%	6.100	0.50	0.15	0.91	72.64	13.26	0.00	0.53	100%	
3-2874B	Dip Coating	W9012A Clear Co	8.6	69.81%	68.1%	1.7%	69.9%	28.23%	6.100	0.50	0.15	0.91	72.64	13.26	0.00	0.53	100%	
3-2869	Dip Coating	W9012A Clear Co	8.6	69.81%	68.1%	1.7%	69.9%	28.23%	4.500	0.50	0.15	0.67	53.58	9.78	0.00	0.53	100%	
3-2872	Dip Coating	W9012A Clear Co	8.6	69.81%	68.1%	1.7%	69.9%	28.23%	4.500	0.50	0.15	0.67	53.58	9.78	0.00	0.53	100%	
3-2873	Dip Coating	W9012A Clear Co	8.6	69.81%	68.1%	1.7%	69.9%	28.23%	4.500	0.50	0.15	0.67	53.58	9.78	0.00	0.53	100%	
<b>Total PTE</b>			<b>Add worst case coating to all solvents</b>															
												<b>8.83</b>	<b>680.12</b>	<b>124.12</b>	<b>0.94</b>			

METHODOLOGY

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

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

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

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

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

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

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

Total = Worst Coating + Sum of all solvents used

Paint Booths- HAPs

Unit ID	Process	Material	Density (Lb/Gal)	usage (gal/hr)	Weight % Triethalamine	Weight % Cobalt Compounds	Triethalamine Emissions (ton/yr)	Cobalt Compounds Emissions (ton/yr)
3-2714	Paint Spray Booth	Aquacron 880	7.80	0.06100	20.00%	20.00%	0.42	0.42
3-2715	Paint Spray Booth	Aquacron 880	7.90	0.10200	25.00%	15.00%	0.88	0.53

METHODOLOGY

HAPS emission rate (tons/yr) = Density (lb/gal) x Usage (gal/hr) x Weight % HAP x 8760 hrs/yr x 1 ton/2000 lbs

Only Aquacron 880 contains HAPs. No other coating material used at the source contain HAPs.

Company Name: Griffin Industries, Inc.  
Address City IN Zip: CR 400 West, Route 1 Box 112, Newberry, IN 47499  
Part 70 Operating Permit Renewal No.: T055-32418-00008  
Reviewer: Mehul Sura  
Application Received: 1/23/2013

Unit ID	Heat Input Capacity (MMBtu/hr)	HHV (mmBtu/mmscf)	Potential Throughput (MMCF/yr)
2-5085	8	1020	68.7
2-5006	1.5	1020	12.9
2-5163	5.1	1020	43.8
2-5075	13	1020	111.6
2-5014	5.2	1020	44.7
2-5015	5.2	1020	44.7
2-5027	20.5	1020	176.1
2-5036	2.5	1020	21.5
2-5164	9.8	1020	84.2

Unit ID	Heat Input Capacity (MMBtu/hr)	HHV (mmBtu/mmscf)	Potential Throughput (MMCF/yr)
2-5097A	5	1020	42.9
2-5201	1.25	1020	10.7
2-5202	1.25	1020	10.7
2-5203A	6.5	1020	55.8
2-5203B	6.5	1020	55.8
2-5204A	2.5	1020	21.5
2-5204B	2.5	1020	21.5
2-5097	5.1	1021	43.8

Emission Factor in lb/MMCF	Pollutant (tons/yr)						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
Emission Rate in lb/MMBtu	0.0019	0.0075	0.0075	0.0006	0.0980	0.0054	0.0824
2-5085	0.065	0.26	0.26	0.02	3.44	0.19	2.89
2-5006	0.012	0.05	0.05	0.00	0.64	0.04	0.54
2-5163	0.042	0.17	0.17	0.01	2.19	0.12	1.84
2-5075	0.106	0.42	0.42	0.03	5.58	0.31	4.69
2-5014	0.042	0.17	0.17	0.01	2.23	0.12	1.88
2-5015	0.042	0.17	0.17	0.01	2.23	0.12	1.88
2-5027	0.167	0.67	0.67	0.05	8.80	0.48	7.39
2-5036	0.020	0.08	0.08	0.01	1.07	0.06	0.90
2-5164	0.080	0.32	0.32	0.03	4.21	0.23	3.53
2-5097A	0.041	0.16	0.16	0.01	2.15	0.12	1.80
2-5201	0.010	0.04	0.04	0.00	0.54	0.03	0.45
2-5202	0.010	0.04	0.04	0.00	0.54	0.03	0.45
2-5203A	0.053	0.21	0.21	0.02	2.79	0.15	2.34
2-5203B	0.053	0.21	0.21	0.02	2.79	0.15	2.34
2-5204A	0.020	0.08	0.08	0.01	1.07	0.06	0.90
2-5204B	0.020	0.08	0.08	0.01	1.07	0.06	0.90
2-5097	0.042	0.17	0.17	0.01	2.19	0.12	1.84
<b>Total</b>	<b>0.786</b>	<b>3.143</b>	<b>3.143</b>	<b>0.248</b>	<b>41.352</b>	<b>2.274</b>	<b>34.736</b>

\*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.  
PM2.5 emission factor is filterable and condensable PM2.5 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  
Emission Rate in lb/MMBtu = Emission Factor (lb/MMCF) / 1020 (MMBtu/MMCF)  
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  
Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu  
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Emission Factor in lb/MMcf	HAPs - Organics (tons/yr)					HAPs - Metals (tons/yr)				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene	Lead	Cadmium	Chromium	Manganese	Nickel
2-5085	0.002	0.001	0.075	1.800	0.003	0.001	0.001	0.001	0.000	0.002
2-5006	7.2E-05	4.1E-05	2.6E-03	6.2E-02	1.2E-04	1.7E-05	3.8E-05	4.8E-05	1.3E-05	7.2E-05
2-5163	1.4E-05	7.7E-06	4.8E-04	1.2E-02	2.2E-05	3.2E-06	7.1E-06	9.0E-06	2.4E-06	1.4E-05
2-5075	4.6E-05	2.6E-05	1.6E-03	3.9E-02	7.4E-05	1.1E-05	2.4E-05	3.1E-05	8.3E-06	4.6E-05
2-5014	1.2E-04	6.7E-05	4.2E-03	1.0E-01	1.9E-04	2.8E-05	6.1E-05	7.8E-05	2.1E-05	1.2E-04
2-5015	4.7E-05	2.7E-05	1.7E-03	4.0E-02	7.6E-05	1.1E-05	2.5E-05	3.1E-05	8.5E-06	4.7E-05
2-5027	4.7E-05	2.7E-05	1.7E-03	4.0E-02	7.6E-05	1.1E-05	2.5E-05	3.1E-05	8.5E-06	4.7E-05
2-5036	1.8E-04	1.1E-04	6.6E-03	1.6E-01	3.0E-04	4.4E-05	9.7E-05	1.2E-04	3.3E-05	1.8E-04
2-5097A	2.3E-05	1.3E-05	8.1E-04	1.9E-02	3.7E-05	5.4E-06	1.2E-05	1.5E-05	4.1E-06	2.3E-05
2-5164	8.8E-05	5.0E-05	3.2E-03	7.6E-02	1.4E-04	2.1E-05	4.6E-05	5.9E-05	1.6E-05	8.8E-05
2-5097A	4.5E-05	2.6E-05	1.6E-03	3.9E-02	7.3E-05	1.1E-05	2.4E-05	3.0E-05	8.2E-06	4.5E-05
2-5201	1.1E-05	6.4E-06	4.0E-04	9.7E-03	1.8E-05	2.7E-06	5.9E-06	7.5E-06	2.0E-06	1.1E-05
2-5202	1.1E-05	6.4E-06	4.0E-04	9.7E-03	1.8E-05	2.7E-06	5.9E-06	7.5E-06	2.0E-06	1.1E-05
2-5203A	5.9E-05	3.3E-05	2.1E-03	5.0E-02	9.5E-05	1.4E-05	3.1E-05	3.9E-05	1.1E-05	5.9E-05
2-5203B	5.9E-05	3.3E-05	2.1E-03	5.0E-02	9.5E-05	1.4E-05	3.1E-05	3.9E-05	1.1E-05	5.9E-05
2-5204A	2.3E-05	1.3E-05	8.1E-04	1.9E-02	3.7E-05	5.4E-06	1.2E-05	1.5E-05	4.1E-06	2.3E-05
2-5204B	2.3E-05	1.3E-05	8.1E-04	1.9E-02	3.7E-05	5.4E-06	1.2E-05	1.5E-05	4.1E-06	2.3E-05
2-5097	4.6E-05	2.6E-05	1.6E-03	3.9E-02	7.4E-05	1.1E-05	2.4E-05	3.1E-05	8.3E-06	4.6E-05
<b>Total</b>	<b>0.001</b>	<b>0.000</b>	<b>0.031</b>	<b>0.744</b>	<b>0.001</b>	<b>0.00021</b>	<b>0.00045</b>	<b>0.00058</b>	<b>0.00016</b>	<b>0.00087</b>

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

Emission Factor in lb/MMcf	Greenhouse Gas (tons/yr)			Summed Potential Emissions in tons/yr	CO2e Total in tons/yr
	CO2	CH4	N2O		
2-5085	120,000	2.3	2.2		
2-5006	4,122	0.1	0.1	4,123	4,147
2-5163	773	0.0	0.0	773	778
2-5075	2,628	0.1	0.0	2,628	2,644
2-5014	6,699	0.1	0.1	6,699	6,739
2-5015	2,680	0.1	0.0	2,680	2,695
2-5027	2,680	0.1	0.0	2,680	2,695
2-5036	10,564	0.2	0.2	10,564	10,626
2-5036	1,288	0.0	0.0	1,288	1,296
2-5164	5,050	0.1	0.1	5,050	5,080
2-5097A	2,576	0.0	0.0	2,577	2,592
2-5201	644	0.0	0.0	644	648
2-5202	644	0.0	0.0	644	648
2-5203A	3,349	0.1	0.1	3,350	3,369
2-5203B	3,349	0.1	0.1	3,350	3,369
2-5204A	1,288	0.0	0.0	1,288	1,296
2-5204B	1,288	0.0	0.0	1,288	1,296
2-5097	2,625	0.1	0.0	2,626	2,641
<b>Total</b>				<b>52,250</b>	<b>52,559</b>

**Methodology**

The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.  
Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.  
Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.  
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton  
CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (25) + N2O Potential Emission ton/yr x N2O GWP (298).

**Appendix A: Emission Calculations**  
**Reciprocating Internal Combustion Engines - Diesel Fuel**  
**Output Rating (<=600 HP)**  
**Maximum Input Rate (<=4.2 MMBtu/hr)**  
 Fire pump engine

**Company Name:** Amsted Rail Company, Inc.  
**Address City IN Zip:** 4831 Holman Avenue, Hammond, Indiana 46327  
**Permit Number:** 089-33178-00204  
**Reviewer:** Mehul Sura  
**Date:** 12/20/2013

**Emissions calculated based on output rating (hp)**

Output Horsepower Rating (hp)	130.0
Maximum Hours Operated per Year	8760
Potential Throughput (hp-hr/yr)	1,138,800

	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/hp-hr	0.0022	0.0022	0.0022	0.0021	0.0310	0.0025	0.0067
Potential Emission in tons/yr	1.25	1.25	1.25	1.17	17.65	1.43	3.80

\*PM and PM2.5 emission factors are assumed to be equivalent to PM10 emission factors. No information was given regarding which method was used to determine the factor or the fraction of PM10 which is condensable.

**Hazardous Air Pollutants (HAPs)**

	Pollutant							
	Benzene	Toluene	Xylene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Acrolein	Total PAH HAPs***
Emission Factor in lb/hp-hr****	6.53E-06	2.86E-06	2.00E-06	2.74E-07	8.26E-06	5.37E-06	6.48E-07	1.18E-06
Potential Emission in tons/yr	3.72E-03	1.63E-03	1.14E-03	1.56E-04	4.70E-03	3.06E-03	3.69E-04	6.70E-04

\*\*\*PAH = Polyaromatic Hydrocarbon (PAHs are considered HAPs, since they are considered Polycyclic Organic Matter)

\*\*\*\*Emission factors in lb/hp-hr were calculated using emission factors in lb/MMBtu and a brake specific fuel consumption of 7,000 Btu / hp-hr (AP-42 Table 3.3-1).

<b>Potential Emission of Total HAPs (tons/yr)</b>	<b>1.54E-02</b>
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**Green House Gas Emissions (GHG)**

	Pollutant		
	CO2	CH4	N2O
Emission Factor in lb/hp-hr	1.15E+00	4.63E-05	9.26E-06
Potential Emission in tons/yr	6.55E+02	2.64E-02	5.27E-03

<b>Summed Potential Emissions in tons/yr</b>	<b>6.55E+02</b>
<b>CO2e Total in tons/yr</b>	<b>6.57E+02</b>

**Methodology**

Emission Factors are from AP42 (Supplement B 10/96), Tables 3.3-1 and 3.3-2

CH4 and N2O Emission Factor from 40 CFR 98 Subpart C Table C-2.

Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.

Potential Throughput (hp-hr/yr) = [Output Horsepower Rating (hp)] \* [Maximum Hours Operated per Year]

Potential Emission (tons/yr) = [Potential Throughput (hp-hr/yr)] \* [Emission Factor (lb/hp-hr)] / [2,000 lb/ton]

CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (25) + N2O

Potential Emission ton/yr x N2O GWP (298).



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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**Michael R. Pence**  
*Governor*

**Thomas W. Easterly**  
*Commissioner*

## SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED

TO: Robert Ribbing  
Amsted Rail Company, Inc.  
1700 Walnut St.  
Granite City, IL 62040

DATE: July 22, 2014

FROM: Matt Stuckey, Branch Chief  
Permits Branch  
Office of Air Quality

SUBJECT: Final Decision  
Title V Operating Permit Renewal  
089-33178-00204

Enclosed is the final decision and supporting materials for the air permit application referenced above. Please note that this packet contains the original, signed, permit documents.

The final decision is being sent to you because our records indicate that you are the contact person for this application. However, if you are not the appropriate person within your company to receive this document, please forward it to the correct person.

A copy of the final decision and supporting materials has also been sent via standard mail to:  
Larry Moore, Operations Manager  
Erin Surinak, Environmental Resources Management (ERM)  
OAQ Permits Branch Interested Parties List

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178, or toll-free at 1-800-451-6027 (ext. 3-0178), and ask to speak to the permit reviewer who prepared the permit. If you think you have received this document in error, please contact Joanne Smiddie-Brush of my staff at 1-800-451-6027 (ext 3-0185), or via e-mail at [jbrush@idem.IN.gov](mailto:jbrush@idem.IN.gov).

Final Applicant Cover letter.dot 6/13/2013



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**Michael R. Pence**  
*Governor*

**Thomas W. Easterly**  
*Commissioner*

July 22, 2014

TO: Hammond Public Library

From: Matthew Stuckey, Branch Chief  
Permits Branch  
Office of Air Quality

Subject: **Important Information for Display Regarding a Final Determination**

**Applicant Name: Amsted Rail Company, Inc.**  
**Permit Number: 089-33178-00204**

You previously received information to make available to the public during the public comment period of a draft permit. Enclosed is a copy of the final decision and supporting materials for the same project. Please place the enclosed information along with the information you previously received. To ensure that your patrons have ample opportunity to review the enclosed permit, **we ask that you retain this document for at least 60 days.**

The applicant is responsible for placing a copy of the application in your library. If the permit application is not on file, or if you have any questions concerning this public review process, please contact Joanne Smiddie-Brush, OAQ Permits Administration Section at 1-800-451-6027, extension 3-0185.

Enclosures  
Final Library.dot 6/13/2013

# Mail Code 61-53

IDEM Staff	VHAUN 7/22/2014 Amsted Rail Company, Inc. 089-33178-00204 FINAL		Type of Mail:  <b>CERTIFICATE OF MAILING ONLY</b>	AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender		Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204		

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee	Remarks
1		Robert Ribbing Amsted Rail Company, Inc. 1700 Walnut St Granite City IL 62040 (Source CAATS)		CONFIRMED DELIVERY								
2		Larry Moore Operations Mgr Amsted Rail Company, Inc. 4831 Hohman Ave Hammond IN 46327 (RO CAATS)										
3		East Chicago City Council 4525 Indianapolis Blvd East Chicago IN 46312 (Local Official)										
4		Lake County Health Department-Gary 1145 W. 5th Ave Gary IN 46402-1795 (Health Department)										
5		WJOB / WZVN Radio 6405 Olcott Ave Hammond IN 46320 (Affected Party)										
6		Hammond City Council and Mayors Office 5925 Calumet Avenue Hammond IN 46320 (Local Official)										
7		Hammond Public Library 564 State St Hammond IN 46320-1532 (Library)										
8		Shawn Sobocinski 3229 E. Atlanta Court Portage IN 46368 (Affected Party)										
9		Mark Coleman 107 Diana Road Portage IN 46368 (Affected Party)										
10		Mr. Chris Hernandez Pipefitters Association, Local Union 597 8762 Louisiana St., Suite G Merrillville IN 46410 (Affected Party)										
11		Craig Hogarth 7901 West Morris Street Indianapolis IN 46231 (Affected Party)										
12		Lake County Commissioners 2293 N. Main St, Building A 3rd Floor Crown Point IN 46307 (Local Official)										
13		Anthony Copeland 2006 E. 140th Street East Chicago IN 46312 (Affected Party)										
14		Barbara G. Perez 506 Lilac Street East Chicago IN 46312 (Affected Party)										
15		Mr. Robert Garcia 3733 Parrish Avenue East Chicago IN 46312 (Affected Party)										

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is \$50,000 per piece subject to a limit of \$50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is \$500. The maximum indemnity payable is \$25,000 for registered mail, sent with optional postal insurance. See <b>Domestic Mail Manual R900, S913, and S921</b> for limitations of coverage on inured and COD mail. See <b>International Mail Manual</b> for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
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# Mail Code 61-53

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Name and address of Sender		Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204		

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee	Remarks
1		Erin Surinak Environmental Resources Management (ERM) 11350 N Meridian Street Suite 320 Carmel IN 46032 (Consultant)										
2		Ms. Karen Kroczek 8212 Madison Ave Munster IN 46321-1627 (Affected Party)										
3		Joseph Hero 11723 S Oakridge Drive St. John IN 46373 (Affected Party)										
4		Gary City Council 401 Broadway # 209 Gary IN 46402 (Local Official)										
5		Ron Novak Hammond Dept. of Environmental Management 5925 Calumnet Ave. Hammond IN 46320 (Local Official)										
6		Mr. Larry Davis 268 South, 600 West Hebron IN 46341 (Affected Party)										
7		Ryan Dave 939 Cornwallis Munster IN 46321 (Affected Party)										
8		Matt Mikus 1710 Vale Park Rd Apt 302 Valparaiso IN 46383 (Affected Party)										
9												
10												
11												
12												
13												
14												
15												

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