



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We Protect Hoosiers and Our Environment.*

100 N. Senate Avenue • Indianapolis, IN 46204

(800) 451-6027 • (317) 232-8603 • [www.idem.IN.gov](http://www.idem.IN.gov)

**Michael R. Pence**  
*Governor*

**Thomas W. Easterly**  
*Commissioner*

TO: Interested Parties / Applicant  
DATE: February 13, 2014  
RE: Novelis Corporation / 167 - 32837 - 00001  
FROM: Matthew Stuckey, Branch Chief  
Permits Branch  
Office of Air Quality

## Notice of Decision: Approval – Effective Immediately

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

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

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

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

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

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

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

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

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

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

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

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



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## Part 70 Operating Permit Renewal OFFICE OF AIR QUALITY

**Novelis Corporation  
5901 North 13th Street  
Terre Haute, Indiana 47805**

(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.: T167-32837-00001	
Issued by:  Iryn Calilung, Section Chief Permits Branch Office of Air Quality	Issuance Date: February 13, 2014 Expiration Date: February 13, 2019

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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)]

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The Permittee owns and operates a stationary stationary source which consists of production equipment to reduce aluminum rolls into finished aluminum coils for foil products.

Source Address:	5901 North 13th Street, Terre Haute, Indiana 47805
General Source Phone Number:	812-462-2143
SIC Code:	3353 (Aluminum Sheet Rolling)
County Location:	Vigo
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Operating Permit Program Major Source, under PSD Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

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

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

- (a) One (1) rolling mill, identified as FP1 Rolling Mill, constructed in 1990, with a maximum capacity of 146,120 pounds per hour of aluminum, using a mist eliminator for controlling the droplet phase of VOC in particulate form, and exhausting to stack 001.
- (b) One (1) rolling mill, identified as Rolling Mill #16, constructed in 1964 and modified in 2001, with a maximum capacity of 52,000 pounds per hour of aluminum (capable of doubling operations), using a mist eliminator for controlling the droplet phase of VOC in particulate form, and exhausting to stack 003.
- (c) One (1) rolling mill, identified as Rolling Mill #19, constructed in 1979, with a maximum capacity of 34,400 pounds per hour of aluminum, using a demister pad for controlling the droplet phase of VOC in particulate form, and exhausting to stack 004.
- (d) One (1) rolling mill, identified as Rolling Mill #20, constructed in 1979, with a maximum capacity of 28,700 pounds per hour of aluminum, using a demister pad for controlling the droplet phase of VOC in particulate form, and exhausting to stack 005.
- (e) One (1) coil annealing furnace, identified as Coil Annealing Furnace #1, constructed in 1990, using natural gas with a maximum heat input capacity of 14.1 million BTU per hour and 1.35 million cubic inches of aluminum per 14-hour cycle, using no control, and exhausting to stack 006.
- (f) One (1) coil annealing furnace, identified as Coil Annealing Furnace #2, constructed in 1990, using natural gas with a maximum heat input capacity of 14.1 million BTU per hour and 1.35 million cubic inches of aluminum per 14-hour cycle, using no control, and exhausting to stack 007.

- (g) One (1) coil annealing furnace, identified as Coil Annealing Furnace #3, constructed in 1990, using natural gas with a maximum heat input capacity of 14.1 million BTU per hour and 1.35 million cubic inches of aluminum per 14-hour cycle, using no control, and exhausting to stack 008.
- (h) One (1) coil annealing furnace, identified as Coil Annealing Furnace #4, constructed in 2008, using natural gas with a maximum heat input capacity of 14.1 million BTU per hour and 1.35 million cubic inches of aluminum per 14-hour cycle, using no control, and exhausting to stack 013.
- (i) One (1) coil annealing furnace, identified as Coil Annealing Furnace #48, constructed in 1967, using natural gas with a maximum heat input capacity of 13.9 million BTU per hour and 1.5 million cubic inches of aluminum per 24-hour cycle, using no control, and exhausting to stack 009.
- (j) One (1) coil annealing furnace, identified as Coil Annealing Furnace #49, constructed in 1967, using natural gas with a maximum heat input capacity of 13.9 million BTU per hour and 1.5 million cubic inches of aluminum per 24-hour cycle, using no control, and exhausting to stack 010.
- (k) One (1) coil annealing furnace, identified as Coil Annealing Furnace #54, constructed in 1980, using natural gas with a maximum heat input capacity of 15.0 million BTU per hour and 1.5 million cubic inches of aluminum per 24-hour cycle, using no control, and exhausting to stack 011.
- (l) One (1) diesel fuel-fired compression ignition emergency engine for fire pump, identified as EG, rated at 355 HP, installed in 1979.

This unit is considered an existing emergency stationary reciprocating internal combustion engine at an area source of hazardous air pollutants under NESHAP, Subpart ZZZZ.

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 which are defined in 326 IAC 2-7-1(21):

- (a) Natural gas-fired Space heaters and boilers (boilers are specified below) with heat input equal to or less than ten million (10,000,000) British thermal units per hour.

<b>Boiler</b>	<b>MMBTU/hr</b>
Office Bldg. Basement	5.20
Water Elevtd. Tank Boiler Hse	1.56
Soluble Oil Farm	8.37
Water Pump House	2.00
Lab Building	2.08

- (b) Core cutting Trimmer and Edge Trim System, not producing fugitive emissions and equipped with cartridge dust collector.
- (c) Welding for Maintenance Use, not resulting in the emission of HAPs. (note: this is considered a trivial activity)
- (d) Five (5) sets of O2/acetylene cutting torches, not resulting in the emission of HAPs. (note: this is considered a trivial activity)

- (e) Wood Working Operation related non-Production activities, controlled by a cyclone, maximum throughput rate of 100 lb wood/hr.
- (f) One (1) 300 gallon gasoline tank, with throughput rate less than 10,000 gallons per month.
- (g) Eight (8) cold cleaner degreasers for Parts Washers and one (1) Bearing Washer, with the cleaners and solvents characterized as having a vapor pressure equal to or less than as specified below.
  - (i) two (2.0) kilo Pascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pound per square inch) measured at thirty-eight (38) degrees Centigrade (one hundred (100) degrees Fahrenheit); or
  - (ii) seven-tenths (0.7) kilo Pascal (five (5) millimeters of mercury or one-tenth (0.1) pound per square inch) measured at twenty (20) degrees Centigrade (sixty-eight (68) degrees Fahrenheit).
- (h) Rolling oil recovery system
- (i) Six (6) Rolling Oil/Filter Media Mixing Tanks
- (j) Two (2) Noncontact cooling tower systems Cooling Towers with either of the following:
  - (i) Natural draft cooling towers not regulated under a NESHAP.
  - (ii) Forced and induced draft cooling tower systems not regulated under a NESHAP.
- (k) Six (6) Rolling Oil Tanks
- (l) Waste Oil Storage Tanks
- (m) Vacuum Distillation Unit for Rolling oil recovery
- (n) Four (4) Wet grinders
- (o) Two (2) 300 gallon diesel fuel tanks
- (p) One (1) 500 gallon diesel fuel tank
- (q) One (1) 350 Kerosene Storage tank

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, T167-32837-00001, 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 July 1 of each year to:

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

and

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

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

The submittal by the Permittee does require 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, 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

- (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  
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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 T167-32837-00001 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(40). 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  
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- (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(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

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

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require 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 forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

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

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

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

The Permittee shall not operate an incinerator 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 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  
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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.6 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.7 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.8 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) 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 or of initial start-up, whichever is later, 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 or the date of initial startup, whichever is later, 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).

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

- (b) 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.

- (c) 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.9 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.10 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.11 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.12 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.13 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.14 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.15 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.

C.16 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [326 IAC 2-2] [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.
- (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.

### **Stratospheric Ozone Protection**

#### **C.17 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:

- (a) One (1) rolling mill, identified as FP1 Rolling Mill, constructed in 1990, with a maximum capacity of 146,120 pounds per hour of aluminum, using a mist eliminator for controlling the droplet phase of VOC in particulate form, and exhausting to stack 001.
- (b) One (1) rolling mill, identified as Rolling Mill #16, constructed in 1964 and modified in 2001, with a maximum capacity of 52,000 pounds per hour of aluminum (capable of doubling operations), using a mist eliminator for controlling the droplet phase of VOC in particulate form, and exhausting to stack 003.
- (c) One (1) rolling mill, identified as Rolling Mill #19, constructed in 1979, with a maximum capacity of 34,400 pounds per hour of aluminum, using a demister pad for controlling the droplet phase of VOC in particulate form, and exhausting to stack 004.
- (d) One (1) rolling mill, identified as Rolling Mill #20, constructed in 1979, with a maximum capacity of 28,700 pounds per hour of aluminum, using a demister pad for controlling the droplet phase of VOC in particulate form, and exhausting to stack 005.

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

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

#### D.1.1 VOC General Reduction Requirements [326 IAC 8-1-6]

Pursuant to PC 84-174-00001 and 326 IAC 8-1-6, General Reduction Requirement, the Permittee shall comply with the following:

- (a) The Permittee shall use low volatility oil (Norpar 15 rolling oil, Linpar 1416-V rolling oil, or its equivalent) in the FP1 Rolling Mill.
- (b) The removal efficiency of the mist eliminator shall be greater than 72%.
- (c) The VOC emissions from the FP1 Rolling Mill shall be limited to less than 123.3 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

#### D.1.2 PSD Minor Limits [326 IAC 2-2]

In order to render 326 IAC 2-2 not applicable (through netting), the Permittee shall comply with the following:

- (a) The VOC emissions from FP1 Rolling Mill shall be limited to less than 123.3 tons per twelve (12) consecutive month period with compliance determined at the end of each month.
- (b) The PM emissions after control from FP1 Rolling Mill shall not exceed 12.45 lb/hr.
- (c) The PM10 emissions after control from FP1 Rolling Mill shall not exceed 12.45 lb/hr.

Note: PM10 is a surrogate for PM2.5. The PM and PM10 emissions are the droplet phase VOC.

Compliance with these limits, combined with the removal of Cold Rolling Mill #10 in 1988, will assure that the 1990 modification did not result in a net VOC, PM and PM<sub>10</sub> emissions increase of 40, 25 and 15 tons per year, respectively, therefore, the requirements of 326 IAC 2-2 are not applicable to the FP1 Rolling Mill.

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

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In order to render 326 IAC 2-2 (PSD) (through netting) not applicable and pursuant to SPM 167-23261-00001, issued on February 11, 2008, the Rolling Mill #16 shall comply with the following:

- (a) The PM emissions after control from Rolling Mill #16 shall not exceed 8.82 lb/hr.
- (b) The PM<sub>10</sub> emissions after control from Rolling Mill #16 shall not exceed 5.57 lb/hr.

Note: PM<sub>10</sub> is a surrogate for PM<sub>2.5</sub>. The PM and PM<sub>10</sub> emissions are the droplet phase VOC.

- (c) The VOC emissions from Rolling Mill #16 shall not exceed 81.3 lb/hr.
- (d) The hours of operation of Rolling Mill #16 shall be less than 7,200 hours per twelve (12) consecutive month period with compliance determined at the end of each month.

Compliance with the above limits in conjunction with the Condition D.1.6 (Removal of Rolling Mill #15) and the Condition D.1.7 (Raw Material Change) shall limit the net emissions of PM, PM<sub>10</sub>, and VOC to less than 25, 15, and 40 tons per year, respectively and render 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable to the 2001 modification to reactivate the Rolling Mill #16.

#### D.1.4 VOC Emissions [326 IAC 8-1-6]

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Pursuant to 326 IAC 8-1-6, the Permittee shall comply with the following:

- (a) Utilize a low volatility oil (Norpar 13 or Linpar 1416-V or its equivalent) in the Rolling Mill #16.
- (b) A mist eliminator shall control the droplet phase VOC (PM) emissions (down to 1 micron) from the Rolling Mill #16. The removal efficiency of the mist eliminator shall be greater than 75%.

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

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Pursuant to 326 IAC 6.5-1-2(a), the particulate matter (PM) emissions from of the FP1 Rolling Mill, Rolling Mill #16, Rolling Mill #19, and Rolling Mill #20 shall not exceed 0.03 grains per dry standard cubic foot, each.

#### D.1.6 Removal of Rolling Mill #15 [326 IAC 2-2]

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Rolling Mill #15 must be permanently removed from service (prior to full time operation of Rolling Mill #16 in order to provide necessary emission credits to make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

This shakedown period shall not exceed six (6) months. During this shakedown period Rolling Mill #15 and Rolling Mill #16 shall not operate more than a combined 168 hours per week (starting on the first day of the shakedown period). This limitation is needed because Novelis Corporation is relying on the emission reduction from Rolling Mill #15 in order to make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable. This limitation effectively limits the total emissions because the Rolling Mill #16 is larger than the Rolling Mill #15

#### D.1.7 Raw Material Change [326 IAC 2-2]

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Pursuant to Agreed Order Case No. 2010-19487-A and in order to render 326 IAC 2-2 not applicable, the existing Rolling Mill #20 shall be permanently converted from utilizing mineral spirits as the raw material for the "doubling process" to utilizing Norpar 13 or its equivalent for that purpose prior to any operation of Rolling Mill #16. This change provides necessary emission credits to make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

#### D.1.8 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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A Preventive Maintenance Plan (PMP) is required for these facilities and their 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.1.9 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

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(a) FP1 Rolling Mill

In order to determine the compliance status with Conditions D.1.1 and D.1.2, the Permittee shall perform particulate removal efficiency testing for the mist eliminator equipped on FP1 Rolling Mill utilizing methods as approved by the Commissioner. The particulate emissions are the droplet phase VOC.

This test shall be performed no later than 5 years from the most recent compliance testing performed for FP1 Rolling Mill and shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration.

(b) Rolling Mill #16

In order to determine compliance with Condition D.1.3, the Permittee shall perform PM, PM<sub>10</sub>, and VOC testing for Rolling Mill #16 utilizing methods as approved by the Commissioner. The PM and PM<sub>10</sub> emissions are the droplet phase VOC.

This test shall be performed no later than 5 years from the most recent compliance testing performed for Rolling Mill #16 and shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration.

(c) Rolling Mill #16

In order to determine compliance with Condition D.1.4, the Permittee shall perform particulate removal efficiency testing for the mist eliminator equipped on Rolling Mill #16 utilizing methods as approved by the Commissioner. The particulate emissions are the droplet phase VOC.

This test shall be performed no later than 5 years from the most recent compliance testing performed for Rolling Mill #16 and shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration.

Section C – Performance Testing contains the Permittee's obligations with regard to the testing required by this condition.

#### D.1.10 Volatile Organic Compounds (VOC) and Particulate Matter (PM)

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In order to ensure compliance with Conditions D.1.1 through D.1.5, the mist eliminators and demister pads for particulate control (which is the droplet phase VOC) shall be in operation and control emissions at all times when FP1 Rolling Mill, Rolling Mill #16, Rolling Mill #19 and Rolling Mill #20 are in operation.

#### D.1.11 Volatile Organic Compounds (VOC)

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In order to ensure compliance with Conditions D.1.1(c) and D.1.2(a), VOC emissions from the FP1 Rolling Mill shall be calculated as follows:

$$E = [O_i - O_p - O_o] \times EF_C / 2000 \text{ lb/ton}$$

Where:

- E = VOC emissions from the FP1 Rolling Mill, ton/month  
O<sub>i</sub> = All coolant purchased for use on the FP1 Rolling Mill, gal/month  
O<sub>p</sub> = All coolant in process on the FP1 Rolling Mill, gal/month  
O<sub>o</sub> = All coolant from the FP1 Rolling Mill that have been sent offsite for oil recycling/waste disposal, gal/month  
EF<sub>C</sub> = 6.4 lb VOC/gal coolant or the actual VOC content per gallon of coolant used

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

##### D.1.12 Visible Emission Notations [40 CFR 64]

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- (a) Visible emission notations of the mist eliminator stack exhaust (stack 001, 003, 004 and 005) shall be performed once per day during normal daylight operations. A trained individual 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 individual is an individual 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 satisfy the Compliance Assurance Monitoring (CAM) for FP1 Rolling Mill and Rolling Mill #16 for VOC (droplet phase VOC).

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

##### D.1.13 Record Keeping Requirements

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- (a) To document the compliance status with Conditions D.1.1 and D.1.2(a), the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken monthly and shall be complete and sufficient to establish compliance with the Conditions D.1.1 and D.1.2(a).
- (1) The amount and type of each coolant purchased and used at FP1 Rolling Mill.
- Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.

- (2) A log of the dates when each coolant is used at FP1 Rolling Mill.
  - (3) Amount of each coolant used at FP1 Rolling Mill and sent offsite for oil recycling/waste disposal.  
  
The coolant recycling/waste disposal record shall differentiate between the amount of recycled/disposed coolant which is previously used at FP1 Rolling Mill and recycled/disposed coolant which is not previously used at FP1 Rolling Mill.
  - (4) Amount of each process coolant at FP1 Rolling Mill.
  - (5) The VOC emissions from FP1 Rolling Mill for each month.
  - (6) Demonstration that the coolant used at FP1 Rolling Mill are Norpar 15 or Linpar 1416-V rolling oil, or equivalent to Norpar 15 or Linpar 1416-V rolling oil.
- (b) To document the compliance status with Condition D.1.3(d), the Permittee shall maintain records of the hours of operation of Rolling Mill #16. Records maintained shall be taken daily and shall be complete and sufficient to establish compliance with the operating time limitation established in Condition D.1.3(d).
- (c) To document the compliance status with Condition D.1.12, the Permittee shall maintain daily records of the visible emission notations of the mist eliminator stack 001, 003, 004 and 005 exhausts. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of a visible emission notation, (e.g. the process did not operate that day).
- (d) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the record keeping required by this condition.

#### D.1.14 Reporting Requirements

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A quarterly summary of the information to document the compliance status with Conditions D.1.2(a) and D.1.3(d) shall be submitted using the reporting forms located at the end of this permit, or their equivalent, no later than thirty (30) days following the end of each calendar quarter. The report 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(34). Section C - General Reporting 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:**

- (e) One (1) coil annealing furnace, identified as Coil Annealing Furnace #1, constructed in 1990, using natural gas with a maximum heat input capacity of 14.1 million BTU per hour and 1.35 million cubic inches of aluminum per 14-hour cycle, using no control, and exhausting to stack 006.
- (f) One (1) coil annealing furnace, identified as Coil Annealing Furnace #2, constructed in 1990, using natural gas with a maximum heat input capacity of 14.1 million BTU per hour and 1.35 million cubic inches of aluminum per 14-hour cycle, using no control, and exhausting to stack 007.
- (g) One (1) coil annealing furnace, identified as Coil Annealing Furnace #3, constructed in 1990, using natural gas with a maximum heat input capacity of 14.1 million BTU per hour and 1.35 million cubic inches of aluminum per 14-hour cycle, using no control, and exhausting to stack 008.
- (h) One (1) coil annealing furnace, identified as Coil Annealing Furnace #4, constructed in 2008, using natural gas with a maximum heat input capacity of 14.1 million BTU per hour and 1.35 million cubic inches of aluminum per 14-hour cycle, using no control, and exhausting to stack 013.
- (i) One (1) coil annealing furnace, identified as Coil Annealing Furnace #48, constructed in 1967, using natural gas with a maximum heat input capacity of 13.9 million BTU per hour and 1.5 million cubic inches of aluminum per 24-hour cycle, using no control, and exhausting to stack 009.
- (j) One (1) coil annealing furnace, identified as Coil Annealing Furnace #49, constructed in 1967, using natural gas with a maximum heat input capacity of 13.9 million BTU per hour and 1.5 million cubic inches of aluminum per 24-hour cycle, using no control, and exhausting to stack 010.
- (k) One (1) coil annealing furnace, identified as Coil Annealing Furnace #54, constructed in 1980, using natural gas with a maximum heat input capacity of 15.0 million BTU per hour and 1.5 million cubic inches of aluminum per 24-hour cycle, using no control, and exhausting to stack 011.
- (l) One (1) diesel fuel-fired compression ignition emergency engine for fire pump, identified as EG, rated at 355 HP, installed in 1979.

This unit is considered an existing emergency stationary reciprocating internal combustion engine at an area source of hazardous air pollutants under NESHAP, Subpart ZZZZ.

**Specifically Regulated Insignificant Activities**

- (a) Natural gas-fired Space heaters and boilers (boilers are specified below) with heat input equal to or less than ten million (10,000,000) British thermal units per hour.

<b>Boiler</b>	<b>MMBTU/hr</b>
Office Bldg. Basement	5.20
Water Elevtd. Tank Boiler Hse	1.56
Soluble Oil Farm	8.37

	Water Pump House	2.00
	Lab Building	2.08

(b) Core cutting Trimmer and Edge Trim System, not producing fugitive emissions and equipped with cartridge dust collector.

(c) Welding for Maintenance Use, not resulting in the emission of HAPs.  
(note: this is considered a trivial activity)

(d) Five (5) sets of O2/acetylene cutting torches, not resulting in the emission of HAPs.  
(note: this is considered a trivial activity)

(e) Wood Working Operation related non-Production activities, controlled by a cyclone, maximum throughput rate of 100 lb wood/hr.

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

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

**D.2.1 Particulate Matter Emission Limitations [326 IAC 6.5-1-2]**

- (a) Pursuant to 326 IAC 6.5-1-2(a), the particulate matter (PM) emissions from each of the facilities listed in this section (except Natural gas-fired Space heaters and boilers) shall not exceed 0.03 grains per dry standard cubic foot.
- (b) Pursuant to 326 IAC 6.5-1-2(b)(3), the particulate matter (PM) emissions from Natural gas-fired boilers listed in this section shall not exceed 0.01 grains per dry standard cubic foot.

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

**D.2.2 Particulate Matter (PM)**

In order to ensure compliance with Conditions D.2.1(a), the particulate control equipped on Core cutting Trimmer and Edge Trim System and Wood Working Operation shall be in operation and control emissions at all times when Core cutting Trimmer and Edge Trim System and Wood Working Operation are in operation.

## SECTION E.1 EMISSIONS UNIT OPERATION CONDITIONS

### Emissions Unit Description:

- (l) One (1) diesel fuel-fired compression ignition emergency engine for fire pump, identified as EG, rated at 355 HP, installed in 1979.

This unit is considered an existing emergency stationary reciprocating internal combustion engine at an area source of hazardous air pollutants under NESHAP, Subpart ZZZZ.

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

### National Emission Standards Hazardous Air Pollutants [326 IAC 20-1][40 CFR 63]

#### E.1.1 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 Fire Pump Diesel Engine (EG), as designated by 40 CFR 63.6590(a)(2), except when otherwise specified in 40 CFR Part 63 Subpart ZZZZ.

#### E.1.2 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 A'), which are incorporated by reference as 326 IAC 20-82 for Fire Pump Diesel Engine (EG):

- (1) 40 CFR 63.6580
- (2) 40 CFR 63.6585
- (3) 40 CFR 63.6590 (a)(1)(iii) and (iv)
- (4) 40 CFR 63.6595 (a)(1), (b), and (c)
- (5) 40 CFR 63.6603 (a)
- (6) 40 CFR 63.6605
- (7) 40 CFR 63.6625 (e),(f),(h),(i)
- (8) 40 CFR 63.6635
- (9) 40 CFR 63.6640
- (10) 40 CFR 63.6645 (a)(5)
- (11) 40 CFR 63.6650 (d), (f)
- (12) 40 CFR 63.6655 (except 40 CFR 63.6655(c))
- (13) 40 CFR 63.6660
- (14) 40 CFR 63.6665
- (15) 40 CFR 63.6670
- (16) 40 CFR 63.6675

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

**Emissions Unit Description:**

(f) One (1) 300 gallon gasoline tank, with throughput rate less than 10,000 gallons per month.

This unit is considered an affected facility under NESHAP, Subpart CCCCCC.

(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 2-6.1-5(a)(1)]**

E.2.1 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants under 40 CFR Part 63 [326 IAC 20-1][40 CFR Part 63, Subpart A]

(a) Pursuant to 40 CFR 63.11130, 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, as specified in Table 3 of 40 CFR Part 63, Subpart CCCCCC in accordance with schedule 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

E.2.2 National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities [40 CFR 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 One (1) 300 gallon gasoline tank:

- (a) 40 CFR 63.11110
- (b) 40 CFR 63.11111
- (c) 40 CFR 63.11112
- (d) 40 CFR 63.11113(a), (b), and (c)
- (e) 40 CFR 63.11115(a)
- (f) 40 CFR 63.11116
- (g) 40 CFR 63.11130
- (h) 40 CFR 63.11131
- (i) 40 CFR 63.11132

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

Source Name:                   Novelis Corporation  
Source Address:           5901 North 13th Street, Terre Haute, Indiana 47805  
Part 70 Permit No.:       T167-32837-00001

**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: Novelis Corporation  
Source Address: 5901 North 13th Street, Terre Haute, Indiana 47805  
Part 70 Permit No.: T167-32837-00001

**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 Quarterly Report**

Source Name: Novelis Corporation  
Source Address: 5901 North 13th Street, Terre Haute, Indiana 47805  
Part 70 Permit No.: T167-32837-00001  
Facility: FP1 Rolling Mill  
Parameter: VOC Emissions  
Limit: Less than 123.3 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

YEAR:

Month	VOC Emissions for This Month (tons)	VOC Emissions for Previous 11 Months (tons)	VOC Emissions for 12-Month Period (tons)

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

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

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

**Part 70 Quarterly Report**

Source Name: Novelis Corporation  
Source Address: 5901 North 13th Street, Terre Haute, Indiana 47805  
Part 70 Permit No.: T167-32837-00001  
Facility: Rolling Mill #16  
Parameter: Hours of Operation  
Limit: Less than 7200 hours per twelve (12) consecutive month period.

YEAR:

Month	Hours of Operation for This Month (hours)	Hours of Operation for Previous 11 Months (hours)	Hours of Operation for 12-Month Period (hours)

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

Submitted by: \_\_\_\_\_  
Title / Position: \_\_\_\_\_  
Signature: \_\_\_\_\_  
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:                   Novelis Corporation  
 Source Address:           5901 North 13th Street, Terre Haute, Indiana 47805  
 Part 70 Permit No.:       T167-32837-00001

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

<p>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".</p>	
<input type="checkbox"/> NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.	
<input type="checkbox"/> THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD	
<b>Permit Requirement</b> (specify permit condition #)	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	
<b>Permit Requirement</b> (specify permit condition #)	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	

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

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

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

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

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

**Attachment A**

**40 CFR Part 63, Subpart ZZZZ— National Emission Standards for  
Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion  
Engines (RICE)**

**Novelis Corporation  
5901 North 13th Street  
Terre Haute, Indiana 47805**

**Permit Renewal No.: T167-32837-00001**

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.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3603, Jan. 18, 2008]

### **§ 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.

Attachment C - NESHAP, Subpart ZZZZ

(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.

(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

Attachment C - NESHAP, Subpart ZZZZ

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;

(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;

(vi) Existing residential emergency stationary RICE located at an area source of HAP emissions;

(vii) Existing commercial emergency stationary RICE located at an area source of HAP emissions; or

(viii) Existing institutional emergency stationary RICE located at an area source of HAP emissions.

(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;

Attachment C - NESHAP, Subpart ZZZZ

(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]

**§ 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 and operating limitations 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 and operating limitations 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 and operating limitations 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.

Attachment C - NESHAP, Subpart ZZZZ

(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]

### **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.

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(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 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 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.

[75 FR 51589, Aug. 20, 2010]

**§ 63.6603 What emission limitations and operating limitations 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 1b and Table 2b to this subpart that apply to you.

(b) If you own or operate an existing stationary non-emergency CI RICE greater than 300 HP located at area sources in areas of Alaska not accessible by the Federal Aid Highway System (FAHS) you do not have to meet the numerical CO emission limitations specified in Table 2d to this subpart. Existing stationary non-emergency CI RICE greater than 300 HP located at area sources in areas of Alaska not accessible by the FAHS must meet the management practices

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that are shown for stationary non-emergency CI RICE less than or equal to 300 HP in Table 2d to this subpart.

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

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

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. Existing non-emergency CI stationary RICE located in Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, or at area sources in areas of Alaska not accessible by the FAHS are exempt from the requirements of this section.

[75 FR 51589, Aug. 20, 2010]

**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 and operating limitations 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]

**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

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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?**

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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.

(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.

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

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

Where:

$C_i$  = concentration of CO or formaldehyde at the control device inlet,

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

R = percent reduction of CO or formaldehyde emissions.

(2) You must normalize the carbon monoxide (CO) 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  $F_o$  value for the fuel burned during the test using values obtained from Method 19, section 5.2, and the following equation:

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

Where:

$F_o$  = 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.

$F_d$  = Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19,  $\text{dsm}^3/\text{J}$  ( $\text{dscf}/10^6 \text{ Btu}$ ).

$F_c$  = Ratio of the volume of CO<sub>2</sub> produced to the gross calorific value of the fuel from Method 19,  $\text{dsm}^3/\text{J}$  ( $\text{dscf}/10^6 \text{ Btu}$ ).

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

$$X_{\text{co}_2} = \frac{5.9}{F_o} \quad (\text{Eq. 3})$$

Where:

$X_{\text{co}_2}$  = 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 NO<sub>x</sub> and SO<sub>2</sub> gas concentrations adjusted to 15 percent O<sub>2</sub> using CO<sub>2</sub> as follows:

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

Where:

%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;

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(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]

**§ 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 oxygen or CO<sub>2</sub> at both the inlet and the outlet of the control device according to the requirements in paragraphs (a)(1) through (4) of this section.

(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.

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(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 (5) 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) 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.

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(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 landfill or digester gas stationary RICE located at an area source of HAP emissions;

(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 (g)(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 not accessible by the FAHS do not have to meet the requirements of paragraph (g) of this section.

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(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 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 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 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 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]

**§ 63.6630 How do I demonstrate initial compliance with the emission limitations and operating limitations?**

- (a) You must demonstrate initial compliance with each emission and operating limitation 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.

**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 and operating limitations?**

- (a) You must demonstrate continuous compliance with each emission limitation and operating limitation 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) [Reserved]
- (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

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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) *Requirements for emergency stationary RICE.* (1) 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, 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 was installed on or after June 12, 2006, or an existing emergency stationary RICE located at an area source of HAP emissions, you must operate the emergency stationary RICE according to the requirements in paragraphs (f)(1)(i) through (iii) of this section. Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1)(i) through (iii) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1)(i) through (iii) of this section, the engine will not be considered an emergency engine under this subpart and will need to meet all requirements for non-emergency engines.

(i) There is no time limit on the use of emergency stationary RICE in emergency situations.

(ii) You may operate your emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. 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 year.

(iii) You may operate your emergency stationary RICE up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving 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; except that owners and operators may operate the emergency engine for a maximum of 15 hours per year as part of a demand response program if the regional transmission organization or equivalent balancing authority and transmission operator has determined there are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or unacceptable voltage level. The engine may not be operated for

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more than 30 minutes prior to the time when the emergency condition is expected to occur, and the engine operation must be terminated immediately after the facility is notified that the emergency condition is no longer imminent. The 15 hours per year of demand response operation are counted as part of the 50 hours of operation per year provided for non-emergency situations. The supply of emergency power to another entity or entities pursuant to financial arrangement is not limited by this paragraph (f)(1)(iii), as long as the power provided by the financial arrangement is limited to emergency power.

(2) If you own or operate an emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that was installed prior to June 12, 2006, you must operate the engine according to the conditions described in paragraphs (f)(2)(i) through (iii) of this section. If you do not operate the engine according to the requirements in paragraphs (f)(2)(i) through (iii) of this section, the engine will not be considered an emergency engine under this subpart and will need to meet all requirements for non-emergency engines.

(i) There is no time limit on the use of emergency stationary RICE in emergency situations.

(ii) You may operate your emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by the manufacturer, the vendor, or the insurance company associated with the engine. Required testing of such units should be minimized, but there is no time limit on the use of emergency stationary RICE in emergency situations and for routine testing and maintenance.

(iii) You may operate your emergency stationary RICE for an additional 50 hours per year in non-emergency situations. The 50 hours per year for non-emergency situations cannot be used for peak shaving 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.

[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]

## **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.

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(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).

[73 FR 3606, Jan. 18, 2008, as amended at 75 FR 9677, Mar. 3, 2010; 75 FR 51591, Aug. 20, 2010]

**§ 63.6650 What reports must I submit and when?**

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(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.

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(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.

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(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.

[69 FR 33506, June 15, 2004, as amended at 75 FR 9677, Mar. 3, 2010]

**§ 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.

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(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) or (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 engines are used for demand response operation, the owner or operator must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response.

(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.

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(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]

**§ 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.

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(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:

*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.

*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

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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 internal combustion engine whose operation is limited to emergency situations and required testing and maintenance. 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. Stationary RICE used for peak shaving are not considered emergency stationary RICE. Stationary RICE used to supply power to an electric grid or that supply non-emergency power as part of a financial arrangement with another entity are not considered to be emergency engines, except as permitted under § 63.6640(f). 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.

*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.

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*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 or 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;

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(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.

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*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  $C_3H_8$ .

*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  $NO_x$  (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 PTTTT of this part, that tests stationary RICE.

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*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]

**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 December 19, 2002 and June 15, 2004, you may reduce formaldehyde emissions by 75 percent or more until June 15, 2007 or	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>
	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]

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**Table 1 b to Subpart ZZZZ of Part 63—Operating Limitations for Existing, New, and Reconstructed Spark Ignition 4SRB Stationary RICE >500 HP Located at a Major Source of HAP Emissions and Existing Spark Ignition 4SRB Stationary RICE >500 HP Located at an Area 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 and existing 4SRB stationary RICE >500 HP located at an area source of HAP emissions that operate more than 24 hours per calendar year:

For each . . .	You must meet the following operating limitation . . .
1. 4SRB stationary RICE 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 4SRB stationary RICE 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; or 4SRB stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 2.7 ppmvd 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.
2. 4SRB stationary RICE 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 4SRB stationary RICE 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; or 4SRB stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 2.7 ppmvd or less at 15 percent O <sub>2</sub> and not using NSCR.	Comply with any operating limitations approved by the Administrator.

[76 FR 12867, Mar. 9, 2011]

**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:

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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 Compression Ignition 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 Compression Ignition Stationary RICE >500 HP, and Existing 4SLB Stationary RICE >500 HP Located at an Area Source of HAP Emissions**

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 compression ignition stationary RICE 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 compression ignition stationary RICE >500 HP; and existing 4SLB stationary RICE >500 HP located at an area source of HAP emissions that operate more than 24 hours per calendar year:

For each . . .	You must meet the following operating limitation . . .
1. 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to reduce CO emissions and using an oxidation catalyst; or 2SLB	a. maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at

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<p>and 4SLB stationary RICE and CI stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and using an oxidation catalyst; or 4SLB stationary RICE and CI stationary RICE complying with the requirement to limit the concentration of CO in the stationary RICE exhaust and using an oxidation catalyst</p>	<p>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. 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to reduce CO emissions and not using an oxidation catalyst; or 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and not using an oxidation catalyst; or 4SLB stationary RICE and CI stationary RICE complying with the requirement to limit the concentration of CO in the stationary RICE exhaust and not using an oxidation catalyst</p>	<p>Comply with any operating limitations approved by the Administrator.</p>

<sup>1</sup> Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.8(g) for a different temperature range.

[75 FR 51593, Aug. 20, 2010, as amended at 76 FR 12867, Mar. 9, 2011]

**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:

<p><b>For each . . .</b></p>	<p><b>You must meet the following requirement, except during periods of startup . . .</b></p>	<p><b>During periods of startup you must . . .</b></p>
<p>1. Emergency stationary CI RICE and black start stationary CI RICE.<sup>1</sup></p>	<p>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;            c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.<sup>3</sup></p>	<p>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></p>

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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;	
	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 $100 \leq \text{HP} \leq 300$ 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 $300 < \text{HP} \leq 500$	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 stationary CI RICE >500 HP	a. Limit concentration of CO 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;	
	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>	

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	b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first;	
	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;	
	c. Inspect all hoses and belts every 4,320 hours of operation or annually, whichever comes first, and replace as necessary. <sup>3</sup>	
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 landfill or digester gas-fired stationary RICE 100 ≤ HP ≤ 500	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

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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) 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.

[75 FR 51593, Aug. 20, 2010]

**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 ≤ 300 HP	a. Change oil and filter every 1,000 hours of operation or annually, whichever comes first; <sup>1</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.
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	
2. Non-Emergency, non-black start CI stationary RICE 300 <HP ≤ 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	

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	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	
	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as 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 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	
	c. Inspect all hoses and belts every 4,320 hours of operation or annually, whichever	

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	comes first, and replace as necessary.	
7. Non-emergency, non-black start 4SLB stationary RICE $\leq$ 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	
	c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.	
8. Non-emergency, non-black start 4SLB stationary RICE $>$ 500 HP	a. Limit concentration of CO in the stationary RICE exhaust to 47 ppmvd at 15 percent O <sub>2</sub> ; or	
	b. Reduce CO emissions by 93 percent or more.	
9. Non-emergency, non-black start 4SRB stationary RICE $\leq$ 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	
	c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.	
10. Non-emergency, non-black start 4SRB stationary RICE $>$ 500 HP	a. Limit concentration of formaldehyde in the stationary RICE exhaust to 2.7 ppmvd at 15 percent O <sub>2</sub> ; or	
	b. Reduce formaldehyde emissions by 76	

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	percent or more.	
11. Non-emergency, non-black start landfill or digester gas-fired stationary RICE	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	
	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) 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.

[75 FR 51595, Aug. 20, 2010]

**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 with a brake horsepower > 500 located at major sources; new or reconstructed 4SLB stationary RICE with a brake horsepower ≥ 250 located at major sources; and new or reconstructed CI stationary RICE with a brake horsepower > 500 located at major sources	Reduce CO emissions and not using a CEMS	Conduct subsequent performance tests semiannually. <sup>1</sup>
2. 4SRB stationary RICE with a brake horsepower ≥ 5,000 located at major sources	Reduce formaldehyde	Conduct subsequent performance tests

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	emissions	semiannually. <sup>1</sup>
3. Stationary RICE with a brake horsepower > 500 located at major sources and new or reconstructed 4SLB stationary RICE with a brake horsepower 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 with a brake horsepower > 500 that are not limited use stationary RICE; existing non-emergency, non-black start 4SLB and 4SRB stationary RICE located at an area source of HAP emissions with a brake horsepower > 500 that are operated more than 24 hours per calendar year that are not limited use stationary RICE	Limit or reduce CO or formaldehyde emissions	Conduct subsequent performance tests every 8,760 hrs. or 3 years, whichever comes first.
5. Existing non-emergency, non-black start CI stationary RICE with a brake horsepower > 500 that are limited use stationary RICE; existing non-emergency, non-black start 4SLB and 4SRB stationary RICE located at an area source of HAP emissions with a brake horsepower > 500 that are operated more than 24 hours per calendar year and are limited use stationary RICE	Limit or reduce CO or formaldehyde emissions	Conduct subsequent performance tests every 8,760 hrs. 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.

[75 FR 51596, Aug. 20, 2010]

**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:

For each . . .	Complying with the requirement to . . .	You must . . .	Using . . .	According to the following requirements . . .
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) Portable CO and O <sub>2</sub> analyzer	(a) Using ASTM D6522-00 (2005) <sup>a</sup> (incorporated by reference, see § 63.14). Measurements to determine O <sub>2</sub> must be made at the same time as the measurements for CO concentration.
		ii. Measure the CO	(1) Portable CO and	(a) Using ASTM D6522-00

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		at the inlet and the outlet of the control device	O <sub>2</sub> analyzer	(2005) <sup>a b</sup> (incorporated by reference, see § 63.14) or Method 10 of 40 CFR appendix 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 D6522-00m (2005)	(a) Measurements to determine O <sub>2</sub> concentration must be made at the same time as the measurements for formaldehyde 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	(a) Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde concentration.
		iv. 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>c</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.
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.
		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 (2005)	(a) Measurements to determine O <sub>2</sub> concentration must be made at the same time and location as the measurements for formaldehyde concentration.

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		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	(a) Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde 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>c</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> Method 320 of 40 CFR part 63, appendix A, or ASTM D6348-03	(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 longer runs.

<sup>a</sup> You may also use Methods 3A and 10 as options to ASTM-D6522-00 (2005). You may obtain a copy of ASTM-D6522-00 (2005) from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106. ASTM-D6522-00 (2005) may be used to test both CI and SI stationary RICE.

<sup>b</sup> You may also use Method 320 of 40 CFR part 63, appendix A, or ASTM D6348-03.

<sup>c</sup> You may obtain a copy of ASTM-D6348-03 from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.

[75 FR 51597, Aug. 20, 2010]

**Table 5 to Subpart ZZZZ of Part 63—Initial Compliance With Emission Limitations and Operating Limitations**

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 . . .
1. New or reconstructed non-	a. Reduce CO	i. The average reduction of

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<p>emergency 2SLB stationary RICE &gt;500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE <math>\geq</math>250 HP located at a major source of HAP, non-emergency stationary CI RICE &gt;500 HP located at a major source of HAP, existing non-emergency stationary CI RICE &gt;500 HP located at an area source of HAP, and existing non-emergency 4SLB stationary RICE &gt;500 HP located at an area source of HAP that are operated more than 24 hours per calendar year</p>	<p>emissions and using oxidation catalyst, and using a CPMS</p>	<p>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, existing non-emergency stationary CI RICE &gt;500 HP located at an area source of HAP, and existing non-emergency 4SLB stationary RICE &gt;500 HP located at an area source of HAP that are operated more than 24 hours per calendar year</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          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>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 <math>\geq</math>250 HP located at a major source of HAP, non-emergency stationary CI RICE &gt;500 HP located at a major source of HAP, existing non-emergency stationary CI RICE &gt;500 HP located at an area source of HAP, and existing non-emergency 4SLB stationary RICE &gt;500 HP located at an area source of HAP that are operated more than 24 hours per calendar year</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, existing non-emergency stationary CI RICE &gt;500 HP located at an area source of HAP, and existing non-emergency 4SLB stationary RICE &gt;500 HP located at an area source of HAP that are operated more than 24 hours per calendar year</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);</p>

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		and iii. You have recorded the approved operating parameters (if any) during the 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 $\geq$ 250 HP located at a major source of HAP, non-emergency stationary CI RICE >500 HP located at a major source of HAP, existing non-emergency stationary CI RICE >500 HP located at an area source of HAP, and existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are operated more than 24 hours per calendar year	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, existing non-emergency stationary CI RICE >500 HP located at an area source of HAP, and existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are operated more than 24 hours per calendar year	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, and existing non-emergency 4SRB stationary RICE >500 HP located at an area source of HAP that are operated more than 24 hours per calendar year	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; and ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the

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		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, and existing non-emergency 4SRB stationary RICE >500 HP located at an area source of HAP that are operated more than 24 hours per calendar year	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; 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. Existing non-emergency 4SRB stationary RICE >500 HP located at an area source of HAP that are operated more than 24 hours per calendar year	a. Limit the concentration of formaldehyde and not using NSCR	i. The average formaldehyde concentration determined from the initial performance test 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.
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	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.

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<p>11. New or reconstructed non-emergency stationary RICE &gt;500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE 250≤HP≤500 located at a major source of HAP, and existing non-emergency 4SRB stationary RICE &gt;500 HP</p>	<p>a. Limit the concentration of formaldehyde in the stationary RICE exhaust and not using oxidation catalyst or NSCR</p>	<p>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</p>
		<p>iii. You have recorded the approved operating parameters (if any) during the initial performance test.</p>
<p>12. Existing non-emergency stationary RICE 100≤HP≤500 located at a major source of HAP, and existing non-emergency stationary CI RICE 300&lt;HP≤500 located at an area source of HAP</p>	<p>a. Reduce CO or formaldehyde emissions</p>	<p>i. The average reduction of emissions of CO or formaldehyde, as applicable determined from the initial performance test is equal to or greater than the required CO or formaldehyde, as applicable, percent reduction.</p>
<p>13. Existing non-emergency stationary RICE 100≤HP≤500 located at a major source of HAP, and existing non-emergency stationary CI RICE 300&lt;HP≤500 located at an area source of HAP</p>	<p>a. Limit the concentration of formaldehyde or CO in the stationary RICE exhaust</p>	<p>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.</p>

[76 FR 12867, Mar. 9, 2011]

**Table 6 to Subpart ZZZZ of Part 63—Continuous Compliance With Emission Limitations, Operating Limitations, Work Practices, and Management Practices**

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          iv. Maintaining the 4-hour rolling</p>

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		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.
2. 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, and new or reconstructed non-emergency CI stationary RICE >500 HP located at a major source of HAP	a. Reduce CO emissions and not using an oxidation catalyst, and using a CPMS	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
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.
3. 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, new or reconstructed non-emergency stationary CI RICE >500 HP located at a major source of HAP, existing non-emergency stationary CI RICE >500 HP, existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are operated more than 24 hours per calendar year	a. Reduce CO emissions or limit the concentration of CO in the stationary RICE exhaust, and using a CEMS	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 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 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

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		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. <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 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

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		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 landfill or digester gas stationary SI RICE located at an area source of HAP, 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 year	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.
10. Existing stationary CI RICE >500 HP that are not limited use stationary RICE, and existing 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate more than 24 hours per calendar year and are not limited use stationary RICE	a. Reduce CO or formaldehyde emissions, or limit the concentration of formaldehyde or CO in the stationary RICE exhaust, and using oxidation catalyst or NSCR	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

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		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, and existing 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate more than 24 hours per calendar year and are not limited use stationary RICE	a. Reduce CO or formaldehyde emissions, or limit the concentration of formaldehyde or CO in the stationary RICE exhaust, and not using oxidation catalyst or NSCR	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.
12. Existing limited use CI stationary RICE >500 HP and existing limited use 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate more than 24 hours per calendar year	a. Reduce CO or formaldehyde emissions or limit the concentration of formaldehyde or CO in the stationary RICE exhaust, and using an oxidation catalyst or NSCR	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

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		§ 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 and existing limited use 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate more than 24 hours per calendar year	a. Reduce CO or formaldehyde emissions or limit the concentration of formaldehyde or CO in the stationary RICE exhaust, and not using an oxidation catalyst or NSCR	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.

<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.

[76 FR 12870, Mar. 9, 2011]

**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	The report must contain ...	You must submit the
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	submit a ...		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; existing non-emergency, non-black start 4SLB and 4SRB stationary RICE <math>&gt; 500</math> HP located at an area source of HAP and operated more than 24 hours per calendar year; 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            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            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)(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.            i. Semiannually according to the requirements in § 63.6650(b).            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 suspected with the meters.</p>	<p>i. See item 2.a.i.</p>

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**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.

<b>General provisions citation</b>	<b>Subject of citation</b>	<b>Applies to subpart</b>	<b>Explanation</b>
§ 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.	
§ 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.

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§ 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.	
§ 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.	

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§ 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	Yes.	
§ 63.8(c)(1)(ii)	SSM not in Startup Shutdown Malfunction Plan	Yes.	
§ 63.8(c)(1)(iii)	Compliance with operation and maintenance requirements	Yes.	
§ 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 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.

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		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.	
§ 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.	

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§ 63.10(b)(1)	Record retention	Yes.	
§ 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.
§ 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]

**Attachment B**

**40 CFR Part 63, Subpart CCCCCC - National Emission Standards for  
Hazardous Air Pollutants for Gasoline-Dispensing Facilities**

**Novelis Corporation  
5901 North 13th Street  
Terre Haute, Indiana 47805**

**Permit Renewal No.: T167-32837-00001**

Attachment B - NESHAP, Subpart CCCCCC

**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.

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(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.

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(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]

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**§ 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.

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(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.

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[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.

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(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

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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

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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

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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.

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*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.

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If you own or operate	Then you must
	(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,

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If you own or operate	Then you must
	(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**

Citation	Subject	Brief description	Applies to subpart CCCCCC
§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.

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Citation	Subject	Brief description	Applies to subpart CCCCCC
§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. See §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.

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Citation	Subject	Brief description	Applies to subpart CCCCCC
§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.

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Citation	Subject	Brief description	Applies to subpart CCCCCC
§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 §63.8(c) and data quality as §63.8(d)	No.
§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.

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Citation	Subject	Brief description	Applies to subpart CCCCCC
§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 time	Yes.
§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.

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Citation	Subject	Brief description	Applies to subpart CCCCCC
§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 intermediate or major change, or alternative to a test method	Yes.
§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.

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Citation	Subject	Brief description	Applies to subpart CCCCCC
§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.

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Citation	Subject	Brief description	Applies to subpart CCCCCC
§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; data that cannot be used in average	No.
§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.

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<b>Citation</b>	<b>Subject</b>	<b>Brief description</b>	<b>Applies to subpart CCCCCC</b>
§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. See §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.

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Citation	Subject	Brief description	Applies to subpart CCCCCC
§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. See §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 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.

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Citation	Subject	Brief description	Applies to subpart CCCCCC
§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]

# Indiana Department of Environmental Management Office of Air Quality

## Addendum to the Technical Support Document (ATSD) for Part 70 Operating Permit Renewal

### Source Description and Location

Source Name:	Novelis Corporation
Source Location:	5901 North 13th Street, Terre Haute, Indiana 47805
County:	Vigo
SIC Code:	3353 (Aluminum Sheet Rolling)
Permit Renewal No.:	T167-32837-00001
Permit Reviewer:	Mehul Sura

### Public Notice Information

On December 15, 2013, the Office of Air Quality (OAQ) had a notice published in the *Tribune Star, Terre Haute*, Indiana stating that IDEM had received an application from Novelis Corporation located at 5901 North 13th Street, Terre Haute, Indiana for a renewal of its Part 70 Operating Permit issued on November 21, 2008. The notice also stated that 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 Part 70 Operating Permit Renewal should be issued as proposed.

On January 14, 2014, Novelis Corporation submitted comments on the proposed Part 70 Operating Permit Renewal which are listed below. The comments are followed by IDEM's response. Deleted language appears as ~~strike throughs~~ and new language appears in **bold**.

Comment 1:

#### Condition A.3 - Insignificant Activities

The Core cutting Trimmer and Edge Trim System, and Welding for Maintenance activities listed in Conditions A.3(c) and (d), respectively, Emissions Unit Description in Section D.2 of the permit and 'Insignificant Activities' section of the TSD should be removed from the list because these emission units are trivial activities as defined in 326 IAC 2-7-1(42).

Response 1:

These trivial activities are subject to the requirements of 326 IAC 6.5-1-2 (Particulate Matter Emission Limitations). Therefore, these trivial activities are listed in the Permit and TSD.

No change has been made due to this comment.

Comment 2:

#### Condition A.3 Insignificant Activities

For clarification, Novelis Corporation requests that the descriptive language of Wood Working Operation be changed to the following:

Wood Working Operation related non-production activities, controlled by a cyclone, maximum throughput rate of 100 lb **wood**/hr.

Response 2:

The descriptive language of Wood Working Operation has been revised.

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

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...

- (e) Wood Working Operation related non-Production activities, controlled by a cyclone, maximum throughput rate of 100 lb **wood**/hr.

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

<p><b>Emissions Unit Description:</b></p> <p>...</p> <p>Specifically Regulated Insignificant Activities</p> <p>...</p> <ul style="list-style-type: none"><li>(e) Wood Working Operation related non-Production activities, controlled by a cyclone, maximum throughput rate of 100 lb <b>wood</b>/hr.</li></ul> <p>...</p>
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Comment 3:

Section D.1 Emission Unit Description

Novelis Corporation suggests that the emission unit description for Rolling Mill #20 be changed to the following to be consistent with the descriptive language for the other rolling mills:

One (1) rolling mill, identified as Rolling Mill #20, constructed in 1979, with a maximum capacity of 28,700 pounds per hour of aluminum, using a demister pad for controlling the droplet phase of VOC in particulate form ~~particulate control~~, and exhausting to stack 005.

Response 3:

The descriptive language for Rolling Mill #20 has been revised.

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

<p><b>Emissions Unit Description:</b></p> <p>...</p> <ul style="list-style-type: none"><li>(d) One (1) rolling mill, identified as Rolling Mill #20, constructed in 1979, with a maximum capacity of 28,700 pounds per hour of aluminum, using a demister pad for controlling the droplet phase of VOC in particulate form <del>particulate control</del>, and exhausting to stack 005.</li></ul> <p>...</p>
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Comment 4:

Condition D.1.2 - PSD Minor Limits

FP1 Rolling Mill is subject to 326 IAC 8-1-6 which requires Best Available Control Technology (BACT). At the time FP1 Rolling Mill was constructed, BACT was determined to be the use of low volatility oil and a mist eliminator with a droplet phase VOC (PM) removal efficiency of greater than 72%. It was determined that these BACT requirements corresponded to a 123.3 TPY VOC limit. The BACT requirements along with the removal of Rolling Mill #10 rendered 326 IAC 2-2 not applicable.

In the Draft Title V renewal permit IDEM has included new hourly limits for PM and PM10 to render 326 IAC 2-2 not applicable. Novelis Corporation requests that IDEM remove the new hourly PM and PM10 limits specified in Conditions D.1.2(b) and (c) because the BACT requirement to control the droplet phase VOC (PM) emissions with a mist eliminator with a removal efficiency greater than 72% is already limiting the PM and PM10 emissions from this source. Novelis Corporation demonstrates compliance with the particulate limits by daily visual emissions observations and removal efficiency emissions testing. Therefore, additional particulate limits are not required.

Response 4:

VOC, PM and PM10 are separate regulated pollutants under 326 IAC 2-2 (PSD Rules), and therefore, each of these pollutants should be evaluated independently under 326 IAC 2-2 rule.

The existing BACT limit for the FP1 Rolling Mill addresses the VOC emissions. PM and PM10 emissions were not evaluated when FP1 Rolling Mill was originally permitted. Through this renewal, IDEM requested netting analysis of PM and PM10 emission change which occurred due the approval of FP1 Rolling Mill. This netting analysis indicated that PM and PM10 limits are needed in the permit to limit the PM and PM10 emission increase to less than 25 and 10 tons per year, respectively, for FP1 Rolling Mill. Therefore, the PM and PM10 limits are included through this renewal.

No change has been made due to this comment.

Comment 5:

Condition - D.1.9 Testing Requirements

The term "no later than" is repeated in Condition D.1.9. Novelis Corporation suggests that IDEM revise this Condition.

Response 5:

Condition D.1.9 has been revised.

D.1.9 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

(a) . . .

This test shall be performed no later than ~~no later than~~ 5 years from the most recent compliance testing performed for FP1 Rolling Mill and shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration.

(b) . . .

This test shall be performed no later than ~~no later than~~ 5 years from the most recent compliance testing performed for Rolling Mill #16 and shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration.

(c) . . .

This test shall be performed no later than ~~no later than~~ 5 years from the most recent compliance testing performed for Rolling Mill #16 and shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration.

. . .

Comment 6:

Condition - D.1.9(b) Rolling Mill #16 Testing Requirements

The draft permit includes requirements to conduct PM, PM10 and VOC emissions testing for Rolling Mill #16. Historically, Rolling Mill #16 has only been required to conduct emissions testing once every 5 years to demonstrate compliance with the droplet phase VOC (PM) removal efficiency of the mist eliminator. The removal efficiency testing requirement is a result of the BACT determination made under Significant Source Modification No. 167-12146-00001, issued on June 19, 2001. BACT was determined to be a combination of utilizing low volatility oil and a mist eliminator controlling droplet phase VOC (PM) emissions by 75%.

When Significant Source Modification No.167-12146-00001 was issued for Rolling Mill #16 additional testing was required for VOC, PM and PM10 emissions to verify the accuracy of the emission estimates upon which the approval was based. As can be seen from the compliance determination requirements specified in Condition D.3.8 of Significant Source Modification No.167-12146-00001, the PM10 and total VOC testing was never intended for compliance purposes. Novelis Corporation requests that IDEM review the original intent of the testing requirements and remove the PM10 and VOC emission testing requirements from this Title V Renewal permit.

Response 6:

Condition D.1.9(b) testing is required to determine compliance with Condition D.1.3. No change has been made due to this comment.

Comment 7:

(a) Condition - D.1.12 Visible Emission Notations

The language of Condition D.1.12 states that the visible emissions monitoring conditions satisfy CAM for FP1 Rolling Mill and Rolling Mill #16 for droplet phase VOC. However, FP1 Rolling Mill and Rolling Mill #16 are not subject to CAM because the potential emissions of droplet phase VOC (PM) are below the major source threshold.

In order for CAM to be applicable to an emission unit, the following criteria specified in 40 CFR Part 64.2 must be met.

- (1) The emission unit has a potential to emit before controls equal to or greater than the major source threshold;
- (2) is subject to an emission limitation or standard for that pollutant; and

- (3) uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.

The only emissions from the rolling mills that are controlled are the droplet phase VOC (PM) emissions. The gaseous VOC emissions are uncontrolled. The calculations in the application and the technical support document demonstrate that the uncontrolled PM and PM10 emissions from all Rolling Mills are all less than 100% of the major source threshold. Therefore, CAM does not apply to any of the mills. Novelis Corporation requests that IDEM remove the CAM language from the permit.

- (b) Technical Support Document - Federal Rule Applicability

The table on page 9 of the Technical Support Document evaluates and identifies CAM applicability for the rolling mills. The table includes an evaluation of PM, PM10, PM2.5 and VOC emissions. The particulate emissions are the only emissions that are controlled from the mills and the emissions are properly identified as droplet phase VOC emissions. The table confirms that the particulate emissions are not subject to CAM.

The VOC emissions listed in the CAM applicability table are a combination of the droplet phase VOC (PM) and the gaseous phase VOC emissions. Only the droplet phase VOC (PM) emissions are controlled by the mist eliminator. The gaseous portions of the total VOC emissions are uncontrolled and because the uncontrolled potential emissions of the droplet phase VOC (PM) are less than 100 TPY, CAM is not applicable. Novelis Corporation requests that you remove the CAM language from the permit and suggest that you update the table footnote to the following:

“VOC included both droplet phase VOC (PM) and gaseous phase VOC. Only the droplet phase VOC (PM) emissions are controlled by the mist eliminators. Gaseous phase VOC emissions are uncontrolled.”

Response 7:

- (a) PTE  
The uncontrolled VOC emissions (consisting gaseous and droplet phase VOC) from FP1 Rolling Mill and Rolling Mill #16 are greater than 100 tons per year (for details of these emissions, please refer Page 3 of 9 TSD Appendix A).

This satisfies the criteria that the uncontrolled emissions are greater than the major source thresholds.

- (b) Emission Limitation  
FP1 Rolling Mill Rolling Mill is subject to the VOC limit under 326 IAC 2-2 and Rolling Mill 16 is subject to the VOC limits under 326 IAC 2-2 and 326 IAC 8-1-6 rules.

This satisfies the criteria that the emissions units are subject to emissions limitations.

- (c) Control  
The mist eliminators are used as add-on control for VOC emissions (for the droplet phase), but nonetheless still VOC.

This satisfies the criteria that the emissions units are subject to emissions limitations.

Based on the above analysis, CAM applies to the mist eliminators equipped on FP1 Rolling Mill and Rolling Mill #16 for VOC pollutant. No change has been made due to this comment.

Comment 8:

The paragraph directly above the table on page 9 of the Technical Support Document lists FP1 Rolling Mill, Rolling Mill #15, Rolling Mill #19 and Rolling Mill #20. Rolling Mill #15 listed in this paragraph should be changed to Rolling Mill #16.

Response 8:

IDEM has acknowledged this typographical error. However, no change is shown for this comment in this ATSD.

Comment 9:

Condition D.1.13 - Record Keeping Requirements

The language of Condition D.1.13 (a)(1) through (a)(5) describes the records that are required to be maintained to establish compliance with the requirement to limit the emissions of VOC for FP1 Rolling Mill to less than 123.3 TPY. Novelis Corporation currently uses a material balance method to calculate these VOC emissions. The theory behind the material balance is that any coolant that cannot be accounted for at the end of the month is considered to be evaporated.

The language in the draft permit is not consistent with record keeping requirements in the past permits and requires Novelis Corporation to track usage. The term "usage" infers that Novelis Corporation would be required to track coolant that is sprayed at the mill. As has been explained to IDEM in past correspondence, the coolant that is used at the mills is recycled numerous times and can be stored in various locations. After the coolant is used it is recycled/cleaned through a VDU process and reused at the mill. Novelis Corporation does not track what is used at the mill because it would not be possible to distinguish the virgin coolant from the recycled coolant.

Novelis Corporation requests that the language for the recordkeeping and reporting requirements for FP1 Rolling Mill be changed to the following, or similar, which is consistent with past permits and reflects the material balance equation that is specified in Condition D.1.11:

"To document the compliance status with Conditions D.1.1(c) the Permittee shall maintain monthly records of all coolant oil that is associated with operations on the FP1 Rolling Mill (Unit 001). Records maintained for this provision shall be complete and sufficient to establish compliance. These records shall include purchase records, process coolant records, and coolant recycling/waste disposal records, and a demonstration that the coolant is low volatility oil (Norpar 15, Linpar 1416-V rolling oil, or its equivalent)."

Response 9:

Condition D.1.13 has been revised.

D.1.13 Record Keeping Requirements

(a) To document the compliance status with Conditions D.1.1 and D.1.2(a), the Permittee shall maintain records in accordance with (1) through (5b) below. Records maintained for (1) through (5b) shall be taken monthly and shall be complete and sufficient to establish compliance with the Conditions D.1.1 and D.1.2(a).

(1) The amount and type of each coolant purchased and used at FP1 Rolling Mill.

Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.

(2) A log of the dates when each coolant is used at FP1 Rolling Mill.

- (3) Amount of each coolant ~~which is used at FP1 Rolling Mill only~~ and sent offsite for oil recycling/waste disposal.

The coolant recycling/waste disposal record shall differentiate between the amount of recycled/disposed coolant which is previously used at FP1 Rolling Mill ~~only~~ and recycled/disposed coolant which is **not** previously used at **FP1 Rolling Mill**~~multiple Rolling Mills~~.

- (4) **Amount of each process coolant at FP1 Rolling Mill.**

- (45) The VOC emissions from FP1 Rolling Mill for each month.

- (56) Demonstration that the coolant used at FP1 Rolling Mill are Norpar 15 or Linpar 1416-V rolling oil, or equivalent to Norpar 15 or Linpar 1416-V rolling oil.

...

Comment 10:

Section E.1

For clarification, Novelis Corporation requests that the emission unit description in Section E.1 be changed to the following:

One (1) diesel fuel-fired compression ignition **emergency** engine for fire pump, identified as EG, rated at 355 HP, installed in 1979.

This unit is considered an existing **emergency** stationary reciprocating internal combustion at an area source of hazardous air pollutants under NESHAP, Subpart ZZZZ.

Response 10:

The description of EG has been revised in Section E.1.

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

**Emissions Unit Description:**

- (l) One (1) diesel fuel-fired compression ignition **emergency** engine for fire pump, identified as EG, rated at 355 HP, installed in 1979.

This unit is considered an existing **emergency** stationary reciprocating internal combustion engine at an area source of hazardous air pollutants under NESHAP, Subpart ZZZZ.

...

Comment 11:

Technical Support Document - Compliance Determination Requirements

The second note under the table on page 17 of the Technical Support Document states that the test for Rolling Mill #16 was performed on August 9, 2010. Novelis Corporation requests that IDEM change this to the correct test date of September 29, 2010.

Response 11:

IDEM has acknowledged this typographical error. However, no change has been shown for this comment in this ATSD.

Comment 12:

Technical Support Document Appendix A - Emission Calculations

The air flow rate used in the PM calculations for Rolling Mill #16 on Page 4 of TSD Appendix A should be corrected to 42,465 afcm. Also, the methodology for the calculations for PM refers to the wrong test date. Novelis Corporation requests that IDEM change the test date to September 29, 2010.

The heat input capacity for Annealing Furnace #48 used in the calculations is incorrect and should be updated to 13.93 mmBtu/hr.

Also, IDEM has included Boiler #8 in the natural gas combustion calculations. Boiler #8 is not a source at Novelis Corporation and had been added by IDEM in error. Novelis Corporation requests that IDEM remove all references to Boiler #8 in the natural gas combustion calculations.

Response 12:

Please see Attachment A of this ATSD for the revised calculation.

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

Process/ Emission Unit	Potential To Emit of the Entire Source After Issuance of Renewal (tons/year)									
	PM	PM <sub>10</sub> *	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO	GHGs	Total HAPs	Worst Single HAP
1990 Modification FP1 Rolling Mill	67.6	67.6	67.6	-	-	123.3	-	-	-	-
2001 Modification Rolling Mill #16	<del>47.83</del> 30.41	<del>47.83</del> 30.41	<del>47.83</del> 30.41	-	-	292.68	-	-	-	-
1979 Rolling Mill #19	30.41	30.41	30.41	-	-	839.96	-	-	-	-
1979 Rolling Mill #20	30.41	30.41	30.41	-	-	700.78	-	-	-	-
1990 Modification Coil Annealing Furnace #1	0.11	0.46	0.46	0.04	6.04	12.91	5.07	7287.51	0.01	0.01
1990 Modification Coil Annealing Furnace #2	0.11	0.46	0.46	0.04	6.03	12.91	5.07	7280.40	0.01	0.01
1990 Modification Coil Annealing Furnace #3	0.11	0.46	0.46	0.04	6.02	12.91	5.06	7273.30	0.01	0.01
2008 Modification Coil Annealing Furnace #4	0.11	0.46	0.46	0.04	6.02	12.91	5.06	7266.22	0.01	0.01
1967 Coil Annealing Furnace #48	0.14	0.56	0.56	0.04	7.33	6.45	5.07	8852.19	0.01	0.01
1967 Coil Annealing Furnace #49	0.11	0.45	0.45	0.04	5.97	6.45	5.07	7202.42	0.01	0.01
1980 Coil Annealing Furnace #54	0.12	0.49	0.49	0.04	6.42	6.45	5.06	7753.65	0.01	0.01
Natural Gas Boilers	0.16	0.63	0.63	0.05	6.04	0.45	6.93	9959.04	0.01	0.01
Natural Gas Heaters	0.51	2.02	2.02	0.16	26.61	1.46	22.35	32122.97	0.01	0.01
Fire Pump Diesel Engine	0.20	0.20	0.20	0.18	2.75	0.22	0.59	102.40	0.002 4	0.0024
Wood Working Operation	0.31	0.31	0.31	-	-	-	-	-	-	-
Eight (8) cold cleaner degreasers and one (1) bearing washer	-	-	-	-	-	2.970	-	-	-	-
<b>Total PTE of Entire Source</b>	<b>178.20</b> <b>160.80</b>	<b>182.60</b> <b>165.29</b>	<b>182.60</b> <b>165.29</b>	<b>0.65</b>	<b>77.87</b> <b>79.22</b>	<b>2032.8</b>	<b>65.32</b>	<b>93469.64</b> <b>95100.10</b>	<b>0.09</b>	<b>0.09</b>
Title V Major Source Thresholds	NA	100	100	100	100	100	100	100,000 CO <sub>2</sub> e	25	10
PSD Major Source Thresholds	250	250	250	250	250	250	250	100,000 CO <sub>2</sub> e	NA	NA

\*Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".

(Note: the table below was generated from the above table, with bold text un-bolded and strikethrough text deleted)

Process/ Emission Unit	Potential To Emit of the Entire Source After Issuance of Renewal (tons/year)									
	PM	PM <sub>10</sub> *	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO	GHGs	Total HAPs	Worst Single HAP
1990 Modification FP1 Rolling Mill	67.6	67.6	67.6	-	-	123.3	-	-	-	-
2001 Modification Rolling Mill #16	47.83	47.83	47.83	-	-	292.68	-	-	-	-
1979 Rolling Mill #19	30.41	30.41	30.41	-	-	839.96	-	-	-	-
1979 Rolling Mill #20	30.41	30.41	30.41	-	-	700.78	-	-	-	-
1990 Modification Coil Annealing Furnace #1	0.11	0.46	0.46	0.04	6.04	12.91	5.07	7287.51	0.01	0.01
1990 Modification Coil Annealing Furnace #2	0.11	0.46	0.46	0.04	6.03	12.91	5.07	7280.40	0.01	0.01
1990 Modification Coil Annealing Furnace #3	0.11	0.46	0.46	0.04	6.02	12.91	5.06	7273.30	0.01	0.01
2008 Modification Coil Annealing Furnace #4	0.11	0.46	0.46	0.04	6.02	12.91	5.06	7266.22	0.01	0.01
1967 Coil Annealing Furnace #48	0.14	0.56	0.56	0.04	7.33	6.45	5.07	8852.19	0.01	0.01
1967 Coil Annealing Furnace #49	0.11	0.45	0.45	0.04	5.97	6.45	5.07	7202.42	0.01	0.01
1980 Coil Annealing Furnace #54	0.12	0.49	0.49	0.04	6.42	6.45	5.06	7753.65	0.01	0.01
Natural Gas Boilers	0.16	0.63	0.63	0.05	6.04	0.45	6.93	9959.04	0.01	0.01
Natural Gas Heaters	0.51	2.02	2.02	0.16	26.61	1.46	22.35	32122.97	0.01	0.01
Fire Pump Diesel Engine	0.20	0.20	0.20	0.18	2.75	0.22	0.59	102.40	0.002 4	0.0024
Wood Working Operation	0.31	0.31	0.31	-	-	-	-	-	-	-
Eight (8) cold cleaner degreasers and one (1) bearing washer	-	-	-	-	-	2.970	-	-	-	-
<b>Total PTE of Entire Source</b>	<b>178.20</b>	<b>182.60</b>	<b>182.60</b>	<b>0.65</b>	<b>77.87</b>	<b>2032.8</b>	<b>65.32</b>	<b>93469.64</b>	<b>0.09</b>	<b>0.09</b>
Title V Major Source Thresholds	NA	100	100	100	100	100	100	100,000 CO <sub>2</sub> e	25	10
PSD Major Source Thresholds	250	250	250	250	250	250	250	100,000 CO <sub>2</sub> e	NA	NA

\*Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".

ATSD Attachment A - Emission Calculations

**Company Name:** Novelis Corporation  
**Address City IN Zip:** 5901 North 13th Street, Terre Haute, Indiana 47805  
**Part 70 Operating Permit Renewal No.:** T167-32837-00001  
**Reviewer:** Mehul Sura  
**Application Received:** 2/15/2013

uncontrolled (tons/yr)										
	PM	PM10	PM2.5	SO2	NOx	VOC	CO	GHGs	Total HAPs	Worst Single HAP
FP1 Rolling Mill	70.08	70.08	70.08	-	-	650.27	-	-	-	-
#16 Rolling Mill	22.19	22.19	22.19	-	-	1269.71	-	-	-	-
#19 Rolling Mill	86.86	86.86	86.86	-	-	839.96	-	-	-	-
#20 Rolling Mill	86.86	86.86	86.86	-	-	700.78	-	-	-	-
Coil Annealing Furnace #1	0.11	0.46	0.46	0.04	6.04	12.91	5.07	7,288	0.01	0.01
Coil Annealing Furnace #2	0.11	0.46	0.46	0.04	6.03	12.91	5.07	7,280	0.01	0.01
Coil Annealing Furnace #3	0.11	0.46	0.46	0.04	6.02	12.91	5.06	7,273	0.01	0.01
Coil Annealing Furnace #4	0.11	0.46	0.46	0.04	6.02	12.91	5.06	7,266	0.01	0.01
Coil Annealing Furnace #48	0.11	0.45	0.45	0.04	5.98	6.45	5.07	7,222	0.01	0.01
Coil Annealing Furnace #49	0.11	0.45	0.45	0.04	5.97	6.45	5.07	7,202	0.01	0.01
Coil Annealing Furnace #54	0.12	0.49	0.49	0.04	6.42	6.45	5.06	7,754	0.01	0.01
Natural Gas Boilers	0.16	0.63	0.63	0.05	6.04	0.45	6.93	0	0.01	0.01
Natural Gas Heaters	0.51	2.02	2.02	0.16	26.61	1.46	22.35	32122.97	0.01	0.01
Fire Pump Diesel Engine	0.20	0.20	0.20	0.18	2.75	0.22	0.59	102.40	0.00	0.00
Wood Working Operation	0.31	0.31	0.31	-	-	-	-	-	-	-
Eight (8) cold cleaner degreasers and one (1) bearing washer	-	-	-	-	-	2.970	-	-	-	-
<b>Total</b>	<b>267.95</b>	<b>272.36</b>	<b>272.36</b>	<b>0.65</b>	<b>77.87</b>	<b>3536.80</b>	<b>65.32</b>	<b>83510.60</b>	<b>0.09</b>	<b>0.09</b>

controlled/limited (tons/yr)										
	PM	PM10	PM2.5	SO2	NOx	VOC	CO	GHGs	Total HAPs	Worst Single HAP
FP1 Rolling Mill	67.58	67.58	67.58	-	-	123.30	-	-	-	-
#16 Rolling Mill	47.83	47.83	47.83	-	-	292.68	-	-	-	-
#19 Rolling Mill	30.41	30.41	30.41	-	-	839.96	-	-	-	-
#20 Rolling Mill	30.41	30.41	30.41	-	-	700.78	-	-	-	-
Coil Annealing Furnace #1	0.11	0.46	0.46	0.04	6.04	12.91	5.07	7287.51	0.01	0.01
Coil Annealing Furnace #2	0.11	0.46	0.46	0.04	6.03	12.91	5.07	7280.40	0.01	0.01
Coil Annealing Furnace #3	0.11	0.46	0.46	0.04	6.02	12.91	5.06	7273.30	0.01	0.01
Coil Annealing Furnace #4	0.11	0.46	0.46	0.04	6.02	12.91	5.06	7266.22	0.01	0.01
Coil Annealing Furnace #48	0.11	0.45	0.45	0.04	5.98	6.45	5.07	7221.73	0.01	0.01
Coil Annealing Furnace #49	0.11	0.45	0.45	0.04	5.97	6.45	5.07	7202.42	0.01	0.01
Coil Annealing Furnace #54	0.12	0.49	0.49	0.04	6.42	6.45	5.06	7753.65	0.01	0.01
Natural Gas Boilers	0.16	0.63	0.63	0.05	6.04	0.45	6.93	9959.04	0.01	0.01
Natural Gas Heaters	0.51	2.02	2.02	0.16	26.61	1.46	22.35	32122.97	0.01	0.01
Fire Pump Diesel Engine	0.20	0.20	0.20	0.18	2.75	0.22	0.59	102.40	0.0024	0.0024
Wood Working Operation	0.31	0.31	0.31	-	-	-	-	-	-	-
Eight (8) cold cleaner degreasers and one (1) bearing washer	-	-	-	-	-	2.970	-	-	-	-
<b>Total</b>	<b>178.20</b>	<b>182.60</b>	<b>182.60</b>	<b>0.65</b>	<b>77.87</b>	<b>2032.80</b>	<b>65.32</b>	<b>93469.64</b>	<b>0.09</b>	<b>0.09</b>

## ATSD Attachment A - Emission Calculations

## Coolant Usage

Company Name: Novelis Corporation  
 Address City IN Zip: 5901 North 13th Street, Terre Haute, Indiana 47805  
 Part 70 Operating Permit Renewal No.: T167-32837-00001  
 Reviewer: Mehul Sura  
 Application Received: 2/15/2013

Month	Rolling Mill #16 , Rolling Mill #19 and Rolling Mill #20 (combined)		FP1 Rolling Mill	
	Coolant Usage (gal)	Total Al Metal Processed (lb)	Coolant Usage (gal)	Total Al Metal Processed (lb)
Jan-08	13937	25,591,000	13780	55,187,000
Feb-08	13953	25,941,000	13609	58,461,000
Mar-08	20489	27,484,000	0	57,972,000
Apr-08	26945	27,018,000	6843	54,462,000
May-08	7049	28,091,000	0	58,001,000
Jun-08	26774	23,352,000	0	43,826,000
Jul-08	10291	27,167,000	13588	54,075,000
Aug-08	13603	26,917,000	0	61,005,000
Sep-08	20489	26,390,000	6756	58,701,000
Oct-08	27926	24,630,000	0	62,599,000
Nov-08	13808	24,440,000	25055	52,969,000
Dec-08	6951	18,741,000	0	38,644,000
<b>Subtotal</b>	<b>202,215</b>	<b>305,762,000</b>	<b>79,631</b>	<b>655,902,000</b>
Jan-09	20848	21134000	0	50,815,000
Feb-09	6948	15233000	0	32,590,000
Mar-09	13795	20407000	0	40,765,000
Apr-09	18951	23070000	22391	51,747,000
May-09	13641	23140000	6598	60,842,000
Jun-09	13394	22656000	13543	57,107,000
Jul-09	13544	26343000	6740	54,954,000
Aug-09	20397	26912000	6684	61,394,000
Sep-09	13781	22319000	20331	54,151,000
Oct-09	19618	26211000	13566	53,722,000
Nov-09	13764	23194000	0	50,166,000
Dec-09	26826	16493000	6744	40,986,000
<b>Subtotal</b>	<b>195,507</b>	<b>267,112,000</b>	<b>96,597</b>	<b>609,239,000</b>
Jan-10	20713	24411000	0	48,946,000
Feb-10	14059	23723000	0	49,694,000
Mar-10	27141	24575000	26428	49,643,000
Apr-10	20827	24318000	0	53,845,000
May-10	13948	25574000	0	52,452,000
Jun-10	13658	23958000	0	54,895,000
Jul-10	30943	24263000	6653	55,696,000
Aug-10	24093	23523000	2884	48,660,000
Sep-10	34801	25589000	11824	50,899,000
Oct-10	20307	27582000	0	52,860,000
Nov-10	21369	25395000	25456	48,862,000
Dec-10	13671	20821000	0	39,528,000
<b>Subtotal</b>	<b>255,530</b>	<b>293,732,000</b>	<b>73,245</b>	<b>605,980,000</b>
Jan-11	18402	25033000	1879	47,696,000
Feb-11	13303	23270000	7048	45,637,000
Mar-11	11230	25774000	1961	54,328,000
Apr-11	16544	24295000	2881	51,510,000
May-11	6850	22427000	0	53,638,000
Jun-11	9521	20232000	9894	57,287,000
Jul-11	11388	21515000	8424	47,819,000
Aug-11	20541	26077000	12667	59,771,000
Sep-11	26743	25669000	6703	57,800,000
Oct-11	6798	13080000	0	54,978,000
Nov-11	0	10518000	0	35,454,000
Dec-11	5961	7564000	9874	25,513,000
<b>Subtotal</b>	<b>147,281</b>	<b>245,454,000</b>	<b>61,331</b>	<b>591,431,000</b>
Jan-12	27613	20000000	6206	51,143,000
Feb-12	13158	21939000	13105	50,604,000
Mar-12	18207	25562000	13637	58,417,000
Apr-12	11447	16881000	7985	51,383,000
May-12	22444	14953000	6524	54,064,000
Jun-12	8195	20576000	5288	56,679,000
Jul-12	10219	23608000	2073	58,434,000
Aug-12	15052	23269000	4968	59,397,000
Sep-12	10279	28100000	13115	57,946,000
Oct-12	12988	17931000	13386	59,258,000
Nov-12	1562	11177000	11821	43,903,000
Dec-12	13420	15724000	0	56,971,000
<b>Subtotal</b>	<b>164,584</b>	<b>239,720,000</b>	<b>98,108</b>	<b>658,199,000</b>

	Average Coolant Usage Rate (gal/lb)	
	Rolling Mill #16 , Rolling Mill #19 and Rolling Mill #20	FP1 Rolling Mill
Year 2008	0.00066	0.00012
Year 2009	0.00073	0.00016 *
Year 2010	0.00087 *	0.00012
Year 2011	0.00060	0.00010
Year 2012	0.00069	0.00015

**Methodology**

Coolant Usage (gal) and Al Metal Processed (lb) information is supplied by the source.

Average Coolant Usage Rate (gal/lb) for a given year = Subtotal Coolant Usage (gal) for a given year / Subtotal Al Metal Processed (lb) for a given year

\* Highest coolant usage rate. These usage rates have been used to determine VOC uncontrolled emissions rates.

**Company Name:** Novelis Corporation  
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**Part 70 Operating Permit Renewal No.:** T167-32837-00001  
**Reviewer:** Mehul Sura  
**Application Received:** 2/15/2013

**VOC Emissions**

Emission Unit	Coolant Material***	Density of Coolant (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Non-Volatiles (solids)	Coolant Usage Rate (gal/lb of Al)	Throughput Rate (lb of Al/hr)	Potential VOC Emissions (lb/hr)	Potential VOC Emissions (tons/yr)	PSD Minor Limit (tons/yr)	PSD Minor Limit (lb/hr)	Limited Hours of Operation (hrs/yr)	VOC Limited PTE (tons/yr)
FP1 Rolling Mill	LINPAR® 1416-V Normal Paraffin	6.4	100.00%	0.0%	100.0%	0.00%	0.00016	146,120	148.46	650.27	123.3*	-	-	123.3*
Rolling Mill #16	LINPAR® 1416-V Normal Paraffin	6.4	100.00%	0.0%	100.0%	0.00%	0.00087	52,000	289.89	1269.71	-	81.30 **	7200	292.68
Rolling Mill #19	LINPAR® 1416-V Normal Paraffin	6.4	100.00%	0.0%	100.0%	0.00%	0.00087	34,400	191.77	839.96	-	-	-	839.96
Rolling Mill #20	LINPAR® 1416-V Normal Paraffin	6.4	100.00%	0.0%	100.0%	0.00%	0.00087	28,700	160.00	700.78	-	-	-	700.78

**Methodology**

\* Existing VOC PSD Minor Limit for FP1 Rolling Mill.

\*\* Existing VOC PSD Minor Limit for Rolling Mill #16.

\*\*\* Some of this coolant evaporates, creating droplet phase and vapor phase hydrocarbon emissions. The droplet phase emissions are controlled by the mist eliminators. There are no control for the vapor phase VOC.

Potential VOC Emissions (lb/hr) = Throughput Rate (lb of Al/hr) x Coolant Usage Rate (gal/lb of Al) x Density of Coolant (Lb/Gal)

Potential VOC Emissions (tons/yr) = Potential VOC Emissions (lb/hr) x 8760 (hrs/yr) x 1/2000 (lbs/ton)

Rolling Mill #16 VOC Limited PTE (tons/yr) = PSD Minor Limit (lb/hr) x Limited Hours of Operation (hrs/yr) x 1/2000 (lbs/ton)

Rolling Mill #19 and Rolling Mill #20 VOC Limited PTE (tons/yr) = Potential VOC Emissions (tons/yr)

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**Part 70 Operating Permit Renewal No.:** T167-32837-00001  
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**FP1 Rolling Mill**

Pollutant	Emission Factor (lb/hr)	Control	Source of Emission Factor	Control Efficiency (%)	Controlled Emissions (tons/yr)	Uncontrolled Emissions (tons/yr)	326 IAC 6.5-1-2 limit (grain/acfm)	air flow rate (acfm)	PTE based on 326 IAC 6.5-1-2 limit (tons/yr)
PM (droplet phase VOC)	2.40 (after control)	mist eliminator	January 6, 2010 compliance test	84.5%	10.51	70.08	0.03	60000	67.6
PM10	2.40 (after control)	mist eliminator	All PM is assumed to be PM10	84.5%	10.51	70.08	0.03	60000	67.6

**Methodology:**

Control Efficiency based on January 6, 2010 compliance test performed for FP1 Rolling Mill.

Controlled Emissions (tons/yr) = Emission Factor (lb/hr) x 8760 (hrs/yr) / 2000 (lbs/ton)

Uncontrolled (tons/yr) = Controlled Emissions (tons/yr) / (1-Control Efficiency)

PTE based on 326 IAC 6.5-1-2 limit (tons/yr) = 326 IAC 6.5-1-2 limit (grain/acfm) x air flow rate (acfm) x 60 (min/hr) x 8760 (hrs/yr) / [7000 (grain/lb) x 2000 (lbs/ton)]

**#16 Rolling Mill**

Pollutant	Emission Factor (lb/hr)	Control	Source of Emission Factor	Control Efficiency (%)	Controlled Emissions (tons/yr)	Uncontrolled Emissions (tons/yr)	326 IAC 6.5-1-2 limit (grain/acfm)	air flow rate (acfm)	PTE based on 326 IAC 6.5-1-2 limit (tons/yr)	326 IAC 2-2 limit (lb/hr)	PTE based on 326 IAC 2-2 limit (tons/yr)
PM (droplet phase VOC)	0.76 (after control)	mist eliminator	September 29, 2010 compliance test	84.3%	3.33	22.19	0.03	42465	47.8	8.82	38.6316
PM10	0.76 (after control)	mist eliminator	All PM is assumed to be PM10	84.3%	3.33	22.19	0.03	42465	47.8	5.57	24.3966

**Methodology:**

Control Efficiency based on September 29, 2010 compliance test performed for #16 Rolling Mill.

Controlled Emissions (tons/yr) = Emission Factor (lb/hr) x 8760 (hrs/yr) / 2000 (lbs/ton)

Uncontrolled (tons/yr) = Controlled Emissions (tons/yr) / (1-Control Efficiency)

PTE based on 326 IAC 6.5-1-2 limit (tons/yr) = 326 IAC 6.5-1-2 limit (grain/acfm) x air flow rate (acfm) x 60 (min/hr) x 8760 (hrs/yr) / [7000 (grain/lb) x 2000 (lbs/ton)]

PTE based on 326 IAC 2-2 limit (tons/yr) = 326 IAC 2-2 limit (lb/hr) x 8760 (hrs/yr) / 2000 (lbs/ton)

**#19 Rolling Mill and #20 Rolling Mill**

Rolling Mills #19 and #20 are identical units. The emissions in the table below represent each

Pollutant	Emission Factor (lb/hr)	Control	Source of Emission Factor	Control Efficiency (%)	Controlled Emissions (tons/yr)	Uncontrolled Emissions (tons/yr)	326 IAC 6.5-1-2 limit (grain/acfm)	air flow rate (acfm)	PTE based on 326 IAC 6.5-1-2 limit (tons/yr)
PM (droplet phase VOC)	19.83 (before control)	mesh pad filter	derived from December 20, 2000 engineering study performed by the source	84.5%	13.03	86.86	0.03	27000	30.4
PM10	19.83 (before control)	mesh pad filter	All PM is assumed to be PM10	84.5%	13.03	86.86	0.03	27000	30.4

**Methodology:**

Control Efficiency based on January 6, 2010 compliance test performed for FP1 Rolling Mill.

Controlled Emissions (tons/yr) = Emission Factor (lb/hr) x 8760 (hrs/yr) / 2000 (lbs/ton)

Uncontrolled (tons/yr) = Controlled Emissions (tons/yr) / (1-Control Efficiency)

PTE based on 326 IAC 6.5-1-2 limit (tons/yr) = 326 IAC 6.5-1-2 limit (grain/acfm) x air flow rate (acfm) x 60 (min/hr) x 8760 (hrs/yr) / [7000 (grain/lb) x 2000 (lbs/ton)]

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	Furnace 48, 49 and 54	Furnaces 1,2,3 and 4
<b><u>Furnace Capacity</u></b>		
Rated Capacity:	150,000 lbs	135,000 lbs
Density of Aluminum:	0.1 lb/in <sup>3</sup>	0.1 lb/in <sup>3</sup>
Maximum Capacity:	1,500,000 in <sup>3</sup>	1,350,000 in <sup>3</sup>

<b><u>Coil Properties</u></b>		
Average Gauge of Coil:	0.00065 in	0.003 in
Total Area of Coils in Furnace:	2,307,692,308 in <sup>2</sup>	450,000,000 in <sup>2</sup>
Total Area of Coils in Furnace:	16,025,641.03 ft <sup>2</sup>	3,125,000 ft <sup>2</sup>
Residual Oil on Coil <sup>1</sup> :	0.000002205 lb oil/ft <sup>2</sup>	0.0000132 lb oil/ft <sup>2</sup>
Residual Oil per Furnace Load:	35.34 lb oil/fce load	41.25 lb oil/fce load
Minimum Furnace Cycle Time:	24 hrs	14 hrs
Maximum Operating Schedule:	8760 hrs/yr	8760 hrs/yr

Note 1: Residual Oil on coil determined from testing during original 1996 Title V permit application.

**VOC Emissions<sup>2</sup>**

Source		Maximum Emissions (each furnace)	
		lbs/hr	TPY
Coil Annealing Furnace #1	006	2.95	12.91
Coil Annealing Furnace #2	007	2.95	12.91
Coil Annealing Furnace #3	008	2.95	12.91
Coil Annealing Furnace #4	013	2.95	12.91
Coil Annealing Furnace #48	009	1.47	6.45
Coil Annealing Furnace #49	010	1.47	6.45
Coil Annealing Furnace #54	011	1.47	6.45

Note 2: A small percentage of the oil remains on the coil depending on the final product. However, the VOC emission calculations assumes that 100% of the residual oil on the coil is emitted.

Maximum Emissions (lb/hr) = Residual Oil per Furnace Load (lb oil/fce load) / Minimum Furnace Cycle Time (hrs)

Maximum Emissions (TPY) = Maximum Emissions (lb/hr) \* 8760 (hrs/yr) / 2000 (lbs/ton)

**Natural Gas Combustion**

Company Name: Novelis Corporation  
 Address City IN Zip: 5901 North 13th Street, Terre Haute, Indiana 47805  
 70 Operating Permit Renewal No.: T167-32837-00001  
 Reviewer: Mahul Sura  
 Application Received: 2/15/2013

	Heat Input Capacity HHV		Potential Throughput	
	MMBtu/hr	mmBtu	MMCF/yr	mmscf
Natural Gas Boilers	19.21	1020	165.0	
Natural Gas Heaters	61.96	1020	532	
#48 Annual Furnace	13.93	1020	119.6	
#49 Annual Furnace	13.92	1022	119.3	
#54 Annual Furnace	15.00	1023	128.4	
#1 Coil Annual Furnace	14.11	1024	123.7	
#2 Coil Annual Furnace	14.11	1025	120.6	
#3 Coil Annual Furnace	14.11	1026	120.5	
#4 Coil Annual Furnace	14.11	1027	120.4	
<b>Total</b>	<b>190.47</b>			

Emission Unit	Total Input MMBtu/hr
Natural Gas	
hoo Bldg. Basement Elevat. Tank Bot	5.20
Soluble Oil	8.97
Water Pump	2.00
Lab Building	2.08
Subtotal	19.21
Natural Gas	
Office Building	0.04
Lab Building	0.08
Sheet Office	0.15
Natural Gas	
#5 Recirc.	0.12
Elevated Water	0.30
#4 Recirc.	0.16
Soluble Oil	0.16
Water Pump	0.16
Water Pump	0.25
Yard	0.05
Yard	0.05
Electrical Sub.	0.13
Fire House	0.17
Fire House	0.17
West Roll Grnd	0.30
West Roll Grnd	0.25
West Roll Grnd	0.25
Screen Handling	0.34
Rav 1R Building	0.16
Carpenter Shop	0.30
Pallet Storage	0.30
Pallet Storage	0.30
Bay 1 (X49 column)	0.25
Bay 1 (X44)	0.25
Rav 14 (Cpl)	2.00
Hose Mandrel	0.25
Hose Mandrel	0.25
North wall of	0.30
Dryer 8 - Heater	6.00
Dryer 15 -	1.90
Stores (Ahrva)	0.16
Stores (West)	0.16
Unloads	
Maintenance	9.16
Rooftop	
Col Line 1C-1C	3.00
Col Line M1-C	3.25
Col Line L-7	3.01
Col Line L-21	3.01
Col Line L-27	3.01
Col Line L-31	3.01
Col Line L-39	3.01
Col Line L-4	8.50
Col Line R-22	5.48
Natural Gas	
S.W. Exterior	0.17
Fire House	0.05
Sub Total	61.96
Natural Gas	
#48 Annual	13.92
#49 Annual	13.92
#54 Annual	15.00
#1 Coil Annual	14.11
#2 Coil Annual	14.11
#3 Coil Annual	14.11
#4 Coil Annual	14.11

Emission Factor in lb/MMCF	Pollutant (tons/yr)						
	PM <sup>10</sup>	PM <sup>2.5</sup>	direct PM <sup>2.5</sup>	SO <sub>2</sub>	NOx	VOC	CO
Natural Gas Boilers	0.157	0.6	0.6	0.05	8.2	0.5	6.9
Natural Gas Heaters	0.506	2.0	2.0	0.16	26.6	1.5	22.4
#48 Annual Furnace	0.114	0.5	0.5	0.04	6.0	0.3	5.0
#49 Annual Furnace	0.113	0.5	0.5	0.04	6.0	0.3	5.0
#54 Annual Furnace	0.122	0.5	0.5	0.04	6.4	0.4	5.4
#1 Coil Annual Furnace	0.115	0.5	0.5	0.04	6.0	0.3	5.1
#2 Coil Annual Furnace	0.114	0.5	0.5	0.04	6.0	0.3	5.1
#3 Coil Annual Furnace	0.114	0.5	0.5	0.04	6.0	0.3	5.1
#4 Coil Annual Furnace	0.114	0.5	0.5	0.04	6.0	0.3	5.1
<b>Total</b>	<b>1.469</b>	<b>5.877</b>	<b>5.877</b>	<b>0.464</b>	<b>77.335</b>	<b>4.253</b>	<b>64.962</b>

\*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.  
 \*\*Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

**Methodology**

All emission factors are based on normal firing.  
 MMBtu = 1,000,000 Btu  
 MMCF = 1,000,000 Cubic Feet of Gas  
 Emission Rate in lb/MMCF = 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

**HAPs Emissions**

Emission Factor in lb/MMcf	HAPs - Organics (tons/yr)				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Natural Gas Boilers	1.732E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Natural Gas Heaters	5.588E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
#48 Annual Furnace	1.256E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
#49 Annual Furnace	1.253E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
#54 Annual Furnace	1.349E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
#1 Coil Annual Furnace	1.268E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
#2 Coil Annual Furnace	1.266E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
#3 Coil Annual Furnace	1.265E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
#4 Coil Annual Furnace	1.264E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
<b>Total</b>	<b>0.002</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>

**HAPs - Metals (tons/yr)**

Emission Factor in lb/MMcf	Lead	Cadmium	Chromium	Manganese	Nickel
	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Natural Gas Boilers	4.125E-05	9.074E-05	1.155E-04	3.135E-05	1.732E-04
Natural Gas Heaters	1.330E-04	2.927E-04	3.725E-04	1.011E-04	5.588E-04
#48 Annual Furnace	2.991E-05	6.580E-05	8.374E-05	2.273E-05	1.256E-04
#49 Annual Furnace	2.983E-05	6.562E-05	8.352E-05	2.267E-05	1.253E-04
#54 Annual Furnace	3.211E-05	7.055E-05	8.991E-05	2.440E-05	1.349E-04
#1 Coil Annual Furnace	3.018E-05	6.640E-05	8.451E-05	2.294E-05	1.268E-04
#2 Coil Annual Furnace	3.015E-05	6.633E-05	8.442E-05	2.292E-05	1.266E-04
#3 Coil Annual Furnace	3.012E-05	6.627E-05	8.434E-05	2.289E-05	1.265E-04
#4 Coil Annual Furnace	3.009E-05	6.620E-05	8.428E-05	2.287E-05	1.264E-04
<b>Total</b>	<b>0.00039</b>	<b>0.00085</b>	<b>0.00108</b>	<b>0.00029</b>	<b>0.00162</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.

**Greenhouse Gas Emissions**

Emission Factor in lb/MMcf	Greenhouse Gas (tons/yr)		
	CO2	CH4	N2O
Natural Gas Boilers	120,000	2.3	2.2
Natural Gas Heaters	31,929	0.6	0.6
#48 Annual Furnace	7,178	0.1	0.1
#49 Annual Furnace	7,159	0.1	0.1
#54 Annual Furnace	7,707	0.1	0.1
#1 Coil Annual Furnace	7,243	0.1	0.1
#2 Coil Annual Furnace	7,236	0.1	0.1
#3 Coil Annual Furnace	7,229	0.1	0.1
#4 Coil Annual Furnace	7,222	0.1	0.1
Natural Gas Boilers	9,959		
Natural Gas Heaters	32,123		
#48 Annual Furnace	7,222		
#49 Annual Furnace	7,202		
#54 Annual Furnace	7,754		
#1 Coil Annual Furnace	7,288		
#2 Coil Annual Furnace	7,280		
#3 Coil Annual Furnace	7,273		
#4 Coil Annual Furnace	7,266		
<b>Total</b>	<b>93,367</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 99 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 (21) + N2O Potential Emission ton/yr x N2O GWP (310).

**ATSD Attachment A: Emission Calculations  
Fire Pump Diesel Engine  
Output Rating (<=600 HP)**

Company Name: Novelis Corporation  
Address City IN Zip: 5901 North 13th Street, Terre Haute, Indiana 47805  
Part 70 Operating Permit Renewal No.: T167-32837-00001  
Reviewer: Mehul Sura  
Application Received: 2/15/2013

**Emissions calculated based on output rating (hp)**

Total Output Horsepower Rating (hp)	355.0
Maximum Hours Operated per Year	500
Potential Throughput (hp-hr/yr)	177,500

	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	0.20	0.20	0.20	0.18	2.75	0.22	0.59

\*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							Total PAH HAPs***
	Benzene	Toluene	Xylene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Acrolein	
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	5.80E-04	2.54E-04	1.77E-04	2.43E-05	7.33E-04	4.76E-04	5.75E-05	1.04E-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>2.41E-03</b>
---	-----------------

**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	1.02E+02	4.11E-03	8.22E-04

<b>Summed Potential Emissions in tons/yr</b>	<b>1.02E+02</b>
<b>CO2e Total in tons/yr</b>	<b>102.40</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 (21) + N2O Potential Emission ton/yr x N2O GWP (310).

**Company Name:** Novelis Corporation  
**Address City IN Zip:** 5901 North 13th Street, Terre Haute, Indiana 47805  
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**Application Received:** 2/15/2013

**Wood Working Operation**

Emission Rate (lb/ton of material processed)	Throughput (lb of wood/hr)	Uncontrolled Emission Rate (tons/yr)	Cyclone efficiency	Controlled Emission Rate (tons/yr)
1.4	100	0.3066	85%	0.04599

**Methodology**

Emission rate has been provided by the source.

Uncontrolled Emission Rate (tons/yr) = ((Emission Rate (lb/ton of material processed) \* Throughput (lb of wood/hr) / 2000 (lb/ton)) \* 8760 (hrs/yr) / 2000 (lb/ton)

Controlled Emission Rate (tons/yr) = Uncontrolled Emission Rate (tons/yr) \* (1-Cyclone efficiency)

**Eight (8) cold cleaner degreasers and one (1) bearing washer**

Location	Current Content	VOC		Description
		lb/day	tons/yr	
Hose Shop	Crystal Clean Odorless Solvent	1.81	0.33	20 gal capacity
Truck Shop	Crystal Clean Odorless Solvent	1.81	0.33	30 gal capacity
air Compressor Basemr	Crystal Clean Odorless Solvent	1.81	0.33	20 gal capacity
FP1 Backup Area	Crystal Clean Odorless Solvent	1.81	0.33	100 gal capacity
Electric Clean Room	Crystal Clean Odorless Solvent	1.81	0.33	10 gal capacity
Reliability Shop	Crystal Clean Odorless Solvent	1.81	0.33	80 gal capacity
VDU Area	Crystal Clean Odorless Solvent	1.81	0.33	10 gal capacity
West Roll Grind Shop	Crystal Clean Odorless Solvent	1.81	0.33	20 gal capacity
Bearings Washer	95 % Water + 5% Nalco Tech Clean 7610	1.81	0.33	900 gal capacity
		Total	2.97	

**Methodology**

Tons per yr Emission Factors are from AP-42 4.6-2 for Cold Cleaners.

VOC Emission (lb/day) = VOC emissions (tons/yr ) \* 2000 (lbs/ton) / 365 days/yr

**Company Name:** Novelis Corporation  
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**Application Received:** 2/15/2013

**Historic PTE Emissions from the Installation of FP1 in 1990:**

**Contemporaneous Emissions Changes**

*Historic Netting Determination from 2/15/1989 Construction Permit Application*

	TPY			
	PM	PM10	VOC	
FP-1			83	
Contemporaneous Increase				
Contemporaneous Decrease*			94	
Net			-11	
PSD Significant Mod. Threshold	25	15	40	For existing major sources with regard to PSD Significant
Significant			No	

**Revised Netting Determination**

IDEM requested revised calculations during the 2013 Title V renewal to include PM and PM10 in the above netting determination. The following changes have been made to the historic netting determination:

After installation and testing of FP1, the mist eliminator was determined to have a control efficiency of 72% and the permit was modified. These revised netting calculations utilize the BACT limit of 123.3 TPY VOC which was based on the updated droplet phase control efficiency of 72%. Because PM and PM10 emissions were not evaluated during the initial netting determination for FP1, the results from the 7/19/1994 compliance test were used to develop a ratio of PM to total VOC.

Formula		
12.45	A	lbs droplet phase VOC (PM)/hr
38.72	B	lbs total VOC/hr
32.15%	$= (A/B) \times 100$	Percentage of VOC that is droplet phase VOC (PM)

**Contemporaneous Emissions Changes**

*Updated Netting Determination*

	TPY			
	PM	PM10	VOC	
FP-1	39.65	39.65	123.30 **	
Contemporaneous Increase				
Contemporaneous Decrease*	30.22	30.22	94	
Net	9.42	9.42	29.3	
PSD Significant Mod. Threshold	25	15	40	For existing major sources with regard to PSD Significant
Significant	No	No	No	

\*Contemporaneous decreases are from the shutdown of the #10 Cold Rolling Mill.

\*\* PSD Minor Limit in the permit.

PM PTE of FP-1 = VOC PTE of FP-1 x Percentage of VOC that is droplet phase VOC (PM)  
 PM10=PM

**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:	Novelis Corporation
Source Location:	5901 North 13th Street, Terre Haute, Indiana 47805
County:	Vigo
SIC Code:	3353 (Aluminum Sheet Rolling)
Permit Renewal No.:	T167-32837-00001
Permit Reviewer:	Mehul Sura

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from Novelis Corporation relating to the operation of a stationary source which consists of production equipment to reduce aluminum rolls into finished aluminum coils for foil products. On February 15, 2013, Novelis Corporation submitted an application to the OAQ requesting to renew its operating permit. Novelis Corporation was issued its first Part 70 Operating Permit Renewal T167-18084-00001 on November 21, 2008.

**Permitted Emission Units and Pollution Control Equipment**

The source consists of the following permitted emission units:

- (a) One (1) rolling mill, identified as FP1 Rolling Mill, constructed in 1990, with a maximum capacity of 146,120 pounds per hour of aluminum, using a mist eliminator for controlling the droplet phase of VOC in particulate form, and exhausting to stack 001.
- (b) One (1) rolling mill, identified as Rolling Mill #16, constructed in 1964 and modified in 2001, with a maximum capacity of 52,000 pounds per hour of aluminum (capable of doubling operations), using a mist eliminator for controlling the droplet phase of VOC in particulate form, and exhausting to stack 003.
- (c) One (1) rolling mill, identified as Rolling Mill #19, constructed in 1979, with a maximum capacity of 34,400 pounds per hour of aluminum, using a demister pad for controlling the droplet phase of VOC in particulate form, and exhausting to stack 004.
- (d) One (1) rolling mill, identified as Rolling Mill #20, constructed in 1979, with a maximum capacity of 28,700 pounds per hour of aluminum, using a demister pad for controlling the droplet phase of VOC in particulate form, and exhausting to stack 005.
- (e) One (1) coil annealing furnace, identified as Coil Annealing Furnace #1, constructed in 1990, using natural gas with a maximum heat input capacity of 14.1 million BTU per hour and 1.35 million cubic inches of aluminum per 14-hour cycle, using no control, and exhausting to stack 006.
- (f) One (1) coil annealing furnace, identified as Coil Annealing Furnace #2, constructed in 1990, using natural gas with a maximum heat input capacity of 14.1 million BTU per hour and 1.35 million cubic inches of aluminum per 14-hour cycle, using no control, and exhausting to stack 007.
- (g) One (1) coil annealing furnace, identified as Coil Annealing Furnace #3, constructed in

1990, using natural gas with a maximum heat input capacity of 14.1 million BTU per hour and 1.35 million cubic inches of aluminum per 14-hour cycle, using no control, and exhausting to stack 008.

- (h) One (1) coil annealing furnace, identified as Coil Annealing Furnace #4, constructed in 2008, using natural gas with a maximum heat input capacity of 14.1 million BTU per hour and 1.35 million cubic inches of aluminum per 14-hour cycle, using no control, and exhausting to stack 013.
- (i) One (1) coil annealing furnace, identified as Coil Annealing Furnace #48, constructed in 1967, using natural gas with a maximum heat input capacity of 13.9 million BTU per hour and 1.5 million cubic inches of aluminum per 24-hour cycle, using no control, and exhausting to stack 009.
- (j) One (1) coil annealing furnace, identified as Coil Annealing Furnace #49, constructed in 1967, using natural gas with a maximum heat input capacity of 13.9 million BTU per hour and 1.5 million cubic inches of aluminum per 24-hour cycle, using no control, and exhausting to stack 010.
- (k) One (1) coil annealing furnace, identified as Coil Annealing Furnace #54, constructed in 1980, using natural gas with a maximum heat input capacity of 15.0 million BTU per hour and 1.5 million cubic inches of aluminum per 24-hour cycle, using no control, and exhausting to stack 011.
- (l) One (1) diesel fuel-fired compression ignition emergency engine for fire pump, identified as EG, rated at 355 HP, installed in 1979.

This unit is considered an existing emergency stationary reciprocating internal combustion engine at an area source of hazardous air pollutants under NESHAP, Subpart ZZZZ.

**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**

The following emission unit has been removed from the source since the Significant Permit Modification No. 167-30519-00001 issued on December 29, 2011:

Rolling Mill #15, with a maximum capacity of 17,100 pounds per hour of aluminum, without control, and exhausting to stack 002.

**Insignificant Activities**

The source also consists of the following insignificant activities:

- (a) Natural gas-fired Space heaters and boilers (boilers are specified below) with heat input equal to or less than ten million (10,000,000) British thermal units per hour.

<b>Boiler</b>	<b>MMBTU/hr</b>
Office Bldg. Basement	5.20
Water Elevtd. Tank Boiler Hse	1.56
Soluble Oil Farm	8.37
Water Pump House	2.00

<b>Boiler</b>	<b>MMBTU/hr</b>
Lab Building	2.08

- (b) Core cutting Trimmer and Edge Trim System, not producing fugitive emissions and equipped with cartridge dust collector.
- (c) Welding for Maintenance Use, not resulting in the emission of HAPs.  
(note: this is considered a trivial activity)
- (d) Five (5) sets of O2/acetylene cutting torches, not resulting in the emission of HAPs.  
(note: this is considered a trivial activity)
- (e) Wood Working Operation related non-Production activities, controlled by a cyclone, maximum throughput rate of 100 lb/hr.
- (f) One (1) 300 gallon gasoline tank, with throughput rate less than 10,000 gallons per month.
- (g) Eight (8) cold cleaner degreasers for Parts Washers and one (1) Bearing Washer, with the cleaners and solvents characterized as having a vapor pressure equal to or less than as specified below.
  - (i) two (2.0) kilo Pascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pound per square inch) measured at thirty-eight (38) degrees Centigrade (one hundred (100) degrees Fahrenheit); or
  - (ii) seven-tenths (0.7) kilo Pascal (five (5) millimeters of mercury or one-tenth (0.1) pound per square inch) measured at twenty (20) degrees Centigrade (sixty-eight (68) degrees Fahrenheit).
- (h) Rolling oil recovery system
- (i) Six (6) Rolling Oil/Filter Media Mixing Tanks
- (j) Two (2) Noncontact cooling tower systems Cooling Towers with either of the following:
  - (i) Natural draft cooling towers not regulated under a NESHAP.
  - (ii) Forced and induced draft cooling tower systems not regulated under a NESHAP.
- (k) Six (6) Rolling Oil Tanks
- (l) Waste Oil Storage Tanks
- (m) Vacuum Distillation Unit for Rolling oil recovery
- (n) Four (4) Wet grinders
- (o) Two (2) 300 gallon diesel fuel tanks
- (p) One (1) 500 gallon diesel fuel tank
- (q) One (1) 350 Kerosene Storage tank

**Existing Approvals**

Since the issuance of the Part 70 Operating Permit T167-18084-00001 on November 21, 2008, the source has constructed or has been operating under the following additional approvals:

- (a) First Administrative Amendment No. 167-27174-00001, issued on November 25, 2008
- (b) Second Administrative Amendment No. 167-28396-00001, issued on September 9, 2009
- (c) Significant Permit Modification No. 167-30519-00001, issued on December 29, 2011

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

**Enforcement Issue**

There are no enforcement actions pending.

**Emission Calculations**

See Appendix A of this document for detailed emission calculations.

**County Attainment Status**

The source is located in Vigo County.

Pollutant	Designation
SO <sub>2</sub>	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O <sub>3</sub>	Attainment effective February 6, 2006, for the Terre Haute area, including Vigo County, for the 8-hour ozone standard. <sup>1</sup>
PM <sub>10</sub>	Unclassifiable effective November 15, 1990.
NO <sub>2</sub>	Cannot be classified or better than national standards.
Pb	Not designated.

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

Unclassifiable or attainment effective April 5, 2005, for PM<sub>2.5</sub>.

- (a) **Ozone Standards**  
 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. Vigo County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO<sub>x</sub> emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (b) **PM<sub>2.5</sub>**  
 Vigo County has been classified as attainment for PM<sub>2.5</sub>. On May 8, 2008, U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for PM<sub>2.5</sub> emissions. These rules became effective on July 15, 2008. On May 4, 2011 the air pollution control board issued an emergency rule establishing the direct PM<sub>2.5</sub> significant level at ten (10) tons per year. This rule became effective, June 28, 2011. Therefore, direct PM<sub>2.5</sub> and SO<sub>2</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  
Vigo County has been classified as attainment or unclassifiable in Indiana for all other 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<sub>10</sub>, PM<sub>2.5</sub> 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.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is less than twenty-five (25) tons per year.

#### **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.

Process/ Emission Unit	Potential To Emit of the Entire Source After Issuance of Renewal (tons/year)									
	PM	PM <sub>10</sub> *	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO	GHGs	Total HAPs	Worst Single HAP
1990 Modification FP1 Rolling Mill	67.6 (a)	67.6 (d)	67.6 (d)	-	-	123.3 (b)	-	-	-	-
2001 Modification Rolling Mill #16	30.41 (a)	30.41 (d)	30.41 (d)	-	-	292.68 (c)	-	-	-	-
1979 Rolling Mill #19	30.41 (a)	30.41 (d)	30.41 (d)	-	-	839.96	-	-	-	-
1979 Rolling Mill #20	30.41 (a)	30.41 (d)	30.41 (d)	-	-	700.78	-	-	-	-
1990 Modification Coil Annealing Furnace #1	0.11	0.46	0.46	0.04	6.04	12.91	5.07	7287.51	0.01	0.01
1990 Modification Coil Annealing Furnace #2	0.11	0.46	0.46	0.04	6.03	12.91	5.07	7280.40	0.01	0.01
1990 Modification Coil Annealing Furnace #3	0.11	0.46	0.46	0.04	6.02	12.91	5.06	7273.30	0.01	0.01
2008 Modification Coil Annealing Furnace #4	0.11	0.46	0.46	0.04	6.02	12.91	5.06	7266.22	0.01	0.01
1967 Coil Annealing Furnace #48	0.14	0.56	0.56	0.04	7.33	6.45	5.07	8852.19	0.01	0.01
1967 Coil Annealing Furnace #49	0.11	0.45	0.45	0.04	5.97	6.45	5.07	7202.42	0.01	0.01
1980 Coil Annealing Furnace #54	0.12	0.49	0.49	0.04	6.42	6.45	5.06	7753.65	0.01	0.01
Natural Gas Boilers	0.16	0.63	0.63	0.05	6.04	0.45	6.93	9959.04	0.01	0.01
Natural Gas Heaters	0.51	2.02	2.02	0.16	26.61	1.46	22.35	32122.97	0.01	0.01
Fire Pump Diesel Engine	0.20	0.20	0.20	0.18	2.75	0.22	0.59	102.40	0.002 4	0.0024
Wood Working Operation	0.31	0.31	0.31	-	-	-	-	-	-	-
Eight (8) cold cleaner degreasers and one (1) bearing washer	-	-	-	-	-	2.970	-	-	-	-
<b>Total PTE of Entire Source</b>	<b>160.80</b>	<b>165.29</b>	<b>165.29</b>	<b>0.65</b>	<b>79.22</b>	<b>2032.8</b>	<b>65.32</b>	<b>95100.10</b>	<b>0.09</b>	<b>0.09</b>
Title V Major Source Thresholds	NA	100	100	100	100	100	100	100,000 CO <sub>2</sub> e	25	10
PSD Major Source Thresholds	250	250	250	250	250	250	250	100,000 CO <sub>2</sub> e	NA	NA

\*Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".

(a) PTEs are based on 326 IAC 6.5-1-2(a) limit in the permit.

- (b) PTE is based on the existing VOC PSD Minor Limit for FP1 Rolling Mill in conjunction with the removal of Cold Rolling Mill #10 in 1988.
- (c) PTE is based on the existing VOC PSD Minor Limit for Rolling Mill #16, in conjunction with the removal of the Rolling Mill #15 and raw material change requirement for the Rolling Mill #20 as pursuant to Agreed Order Case No. 2010-19487-A.
- (d) PM=PM10=PM2.5

All Potential to Emit not specified (a) through (c) above are uncontrolled emission rates.

This existing stationary source is major for PSD because the emissions of at least one attainment pollutant are greater than two hundred fifty (>250) tons per year, and it is not in one of the twenty-eight (28) listed source categories.

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.

#### PSD Permitting History

- (1) 1967 -1979  
The source is considered a PSD major source because VOC emissions are greater than 250 tons per year.
- (2) 1980  
The 1980 modification was a minor modification to an existing PSD major source because the emissions are less than the PSD significant thresholds.
- (3) 1990  
The 1990 modification was a minor modification for VOC and PM to an existing PSD major source because the net emissions increase are less than the than the PSD significant thresholds due to the removal of the Cold Mill #10 in 1988.  
  
Note: PM and PM10 emissions are the droplet phase of VOC. Since PM, PM10 and VOC have different PSD significant thresholds, they are reviewed separately.
- (4) 2001  
The 2001 modification was a minor modification to an existing PSD major source because the net emissions increase are less than the than the PSD significant thresholds due to the removal of the Rolling Mill #15 and the conversion of Rolling Mill #20 to Norpar 13 (or its equivalent).
- (5) 2008  
The 2008 modification was a minor modification to an existing PSD major source because the emissions are less than the PSD significant thresholds.

The table below is similar to the above table; however, the units are arranged in terms of the years of construction/modification:

Process/ Emission Unit	Potential To Emit of the Entire Source After Issuance of Renewal (tons/year)									
	PM	PM <sub>10</sub> *	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO	GHGs	Total HAPs	Worst Single HAP
1967 Coil Annealing Furnace #48	0.14	0.56	0.56	0.04	7.33	6.45	5.07	8852.19	0.01	0.01
1967 Coil Annealing Furnace #49	0.11	0.45	0.45	0.04	5.97	6.45	5.07	7202.42	0.01	0.01
1979 Rolling Mill #19	30.41	30.41	30.41	-	-	839.96	-	-	-	-
1979 Rolling Mill #20	30.41	30.41	30.41	-	-	700.78	-	-	-	-
1980 Coil Annealing Furnace #54	0.12	0.49	0.49	0.04	6.42	6.45	5.06	7753.65	0.01	0.01
1990 Modification FP1 Rolling Mill	67.6	67.6	67.6	-	-	123.3	-	-	-	-
1990 Modification Coil Annealing Furnace #1	0.11	0.46	0.46	0.04	6.04	12.91	5.07	7287.51	0.01	0.01
1990 Modification Coil Annealing Furnace #2	0.11	0.46	0.46	0.04	6.03	12.91	5.07	7280.40	0.01	0.01
1990 Modification Coil Annealing Furnace #3	0.11	0.46	0.46	0.04	6.02	12.91	5.06	7273.30	0.01	0.01
2001 Modification Rolling Mill #16	30.41	30.41	30.41	-	-	292.68	-	-	-	-
2008 Modification Coil Annealing Furnace #4	0.11	0.46	0.46	0.04	6.02	12.91	5.06	7266.22	0.01	0.01
Natural Gas Boilers	0.16	0.63	0.63	0.05	6.04	0.45	6.93	9959.04	0.01	0.01
Natural Gas Heaters	0.51	2.02	2.02	0.16	26.61	1.46	22.35	32122.97	0.01	0.01
Fire Pump Diesel Engine	0.20	0.20	0.20	0.18	2.75	0.22	0.59	102.40	0.0024	0.0024
Wood Working Operation	0.31	0.31	0.31	-	-	-	-	-	-	-
Eight (8) cold cleaner degreasers and one (1) bearing washer	-	-	-	-	-	2.970	-	-	-	-
<b>Total PTE of Entire Source</b>	<b>160.80</b>	<b>165.29</b>	<b>165.29</b>	<b>0.65</b>	<b>79.22</b>	<b>2032.8</b>	<b>65.32</b>	<b>95100.10</b>	<b>0.09</b>	<b>0.09</b>
Title V Major Source Thresholds	NA	100	100	100	100	100	100	100,000 CO <sub>2</sub> e	25	10
PSD Major Source Thresholds	250	250	250	250	250	250	250	100,000 CO <sub>2</sub> e	NA	NA

\*Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".

**Federal Rule Applicability**

(a) 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.

FP1 Rolling Mill, Rolling Mill #15, Rolling Mill #19 and Rolling Mill #20 are equipped with controls. Therefore, CAM has been evaluated for these emission units only. The following table is used to identify the applicability of each of the criteria, under 40 CFR 64.1, to each of these emission units and specified pollutant subject to CAM:

Emission Unit/Pollutant	Pollutant	Control	Emission Limitation (Y/N)	Uncontrolled PTE (tons/year)	Controlled PTE (tons/year)	Major Source Threshold (tons/year)	CAM Applicable (Y/N)	Large Unit (Y/N)				
FP1 Rolling Mill	PM (droplet phase VOC)	Yes	Y	< 100	CAM is not applicable because the uncontrolled PM, PM10 and PM2.5 emissions, each, are less than 100 ton/yr							
Rolling Mill #16		Yes	Y	< 100								
Rolling Mill #19		Yes	Y	< 100								
Rolling Mill #20		Yes	Y	< 100								
FP1 Rolling Mill	PM10 (droplet phase VOC)	Yes	Y	< 100								
Rolling Mill #16		Yes	Y	< 100								
Rolling Mill #19		Yes	N	< 100								
Rolling Mill #20		Yes	N	< 100								
FP1 Rolling Mill	PM2.5 (droplet phase VOC)	Yes	N	< 100								
Rolling Mill #16		Yes	N	< 100								
Rolling Mill #19		Yes	N	< 100								
Rolling Mill #20		Yes	N	< 100								
FP1 Rolling Mill	VOC	Yes*	Y	> 100					> 100	100	Y	Y
Rolling Mill #16		Yes*	Y	> 100					> 100	100	Y	Y
Rolling Mill #19		Yes*	N	> 100					> 100	100	N	--
Rolling Mill #20		Yes*	N	> 100					> 100	100	N	--

\*Droplet phase VOC emissions are controlled by the mist eliminators. Vapor phase VOC emissions are uncontrolled.

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are applicable to FP1 Rolling Mill and Rolling Mill #16 for VOC (droplet phase VOC).

A CAM plan will be incorporated into this proposed renewal. The Compliance Determination and Monitoring Requirements section includes a detailed description of the CAM requirements.

**New Source Performance Standards (NSPS)**

- (a) Subpart IIII—Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

Fire Pump Diesel Engine (EG) is not subject to this NSPS because it was installed in 1979 (which is prior to July 11, 2006, the applicability of this NSPS) and this engine has not been modified or reconstructed since July 11, 2006.

- (b) Subpart K—Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978

Subpart Ka—Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984

Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984

All diesel, gasoline and kerosene storage tanks at this source are not subject to the above NSPSs because the storage capacity of each of these facilities is less than the minimum storage capacity applicable threshold of these NSPSs.

- (c) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) included in the permit due to the proposed renewal for this source.

**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 the permit due to the proposed renewal for this source.

- (b) Subpart CCCCCC - National Emission Standards for Hazardous Air Pollutants for Gasoline-Dispensing Facilities

- (i) Two (2) 300 gallon diesel fuel, one (1) 500 gallon diesel fuel and one (1) 350 gallon Kerosene Storage tanks are not subject to this NESHAP because Reid vapor pressure of diesel and Kerosene, each, is less than 27.6 kilopascals.
- (ii) One (1) 300 gallon gasoline tank is subject to this NSPS because it is a gasoline (Reid vapor pressure greater than 27.6 kilopascals) dispensing facility (GDF) located at an area source of HAP.

Nonapplicable portions of the NESHAP will not be included in the permit. One (1) 300 gallon gasoline tank is subject to the following applicable portions of the NESHAP for an existing gasoline dispensing facility with a monthly throughput of less than 10,000 gallons of gasoline:

- (a) 40 CFR 63.11110
- (b) 40 CFR 63.11111
- (c) 40 CFR 63.11112
- (d) 40 CFR 63.11113(a), (b), and (c)
- (e) 40 CFR 63.11115(a)
- (f) 40 CFR 63.11116
- (g) 40 CFR 63.11130
- (h) 40 CFR 63.11131
- (i) 40 CFR 63.11132

This is a new applicable requirement. This is a Title I change.

No testing requirements are specified for One (1) 300 gallon gasoline tank under this NESHAP.

- (c) Subpart JJJJJJ—National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources

The following listed boilers are not subject to the requirements of this NESHAP because these boilers are considered gas-fired boiler under this NESHAP:

Boiler	MMBTU/hr
Office Bldg. Basement	5.20
Water Elevtd. Tank Boiler Hse	1.56
Soluble Oil Farm	8.37
Water Pump House	2.00
Lab Building	2.08

- (d) Subpart ZZZZ - National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE)

Fire Pump Diesel Engine (EG) is subject to this NESHAP, which is incorporated by reference as 326 IAC 20-82-1, because it is considered existing stationary RICE at an area source of HAP and is emergency stationary RICE with a site rating of less than 500 HP.

Nonapplicable portions of the NESHAP will not be included in the permit. Fire Pump Diesel Engine (EG) is subject to the following portions of Subpart ZZZZ:

- (1) 40 CFR 63.6580
- (2) 40 CFR 63.6585
- (3) 40 CFR 63.6590 (a)(1)(iii) and (iv)
- (4) 40 CFR 63.6595 (a)(1), (b), and (c)
- (5) 40 CFR 63.6603 (a)
- (6) 40 CFR 63.6605
- (7) 40 CFR 63.6625 (e),(f),(h),(i)
- (8) 40 CFR 63.6635
- (9) 40 CFR 63.6640
- (10) 40 CFR 63.6645 (a)(5)
- (11) 40 CFR 63.6650 (d), (f)
- (12) 40 CFR 63.6655 (except 40 CFR 63.6655(c))
- (13) 40 CFR 63.6660
- (14) 40 CFR 63.6665
- (15) 40 CFR 63.6670
- (16) 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 Fire Pump Diesel Engine (EG) except when otherwise specified in 40 CFR 63, Subpart ZZZZ.

This is a new applicable requirement. This is a Title I change.

No testing requirements are specified for Fire Pump Diesel Engine (EG) under this NSPS.

- (e) There are no other NESHAP (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in the permit due to the proposed renewal for this source.

### State Rule Applicability - Entire Source

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

The 326 IAC 2-2 related conditions specified in the existing permit have been updated as shown below. Deleted language appears as ~~strike throughs~~ and new language appears in **bold**. The Permittee shall comply with these updated conditions.

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

- (a) The VOC emissions of ~~Norpar 15 rolling oil, Linpar 1416-V rolling oil, (or equivalent) from~~ the FP1 Rolling Mill shall be limited to less than 123.3 tons per twelve (12) consecutive month period with compliance determined at the end of each month.
- (b) **The PM emissions after control from FP1 Rolling Mill shall not exceed 12.45 lb/hr.**
- (c) **The PM<sub>10</sub> emissions after control from FP1 Rolling Mill shall not exceed 12.45 lb/hr.**

Compliance with these limits, combined with the removal of Cold Rolling Mill #10 in 1988, will assure that the 1990 modification did not result in a net VOC, **PM** and **PM<sub>10</sub>** emissions increase of 40, **25** and **15** tons per year, **respectively**, therefore, the requirements of 326 IAC 2-2 are not applicable to the FP1 Rolling Mill (~~Unit 004~~).

Pursuant to 326 IAC 2-1.1-5, PM<sub>10</sub> is a surrogate for PM<sub>2.5</sub>.

Note: The limits specified in paragraphs (b) and (c) above are new applicable requirements. These are Title I changes. These limits were not included in the permit when FP1 Rolling Mill was originally permitted because PM and PM<sub>10</sub> netting analysis was not performed when FP1 Rolling Mill permitted. The source has provided netting analysis under this renewal and these limits have been used in this netting analysis. The source derived these limits from the stack test performed for the FP1 Rolling Mill in July 1994. Please refer Appendix A of this document for the summary of this netting analysis.

The mist eliminator equipped on FP1 Rolling Mill for droplet phase VOC in particulate form shall be in operation and control emissions at all times when FP1 Rolling Mill is in operation.

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

Pursuant to SPM 167-23261-00001, issued on February 11, 2008, the Rolling Mill #16 (~~Unit 003~~) shall comply with the following:

- (a) The PM emissions **after control** from Rolling Mill #16 (~~Unit 003~~) shall not exceed 8.82 lb/hr.
- (b) The PM<sub>10</sub> emissions **after control** from Rolling Mill #16 (~~Unit 003~~) shall not exceed 5.57 lb/hr.
- (c) The VOC emissions from Rolling Mill #16 (~~Unit 003~~) shall not exceed 81.3 lb/hr.

- (d) The hours of operation of Rolling Mill #16 (~~Unit 003~~) shall be less than 7,200 hours per twelve (12) consecutive month period with compliance determined at the end of each month.

Compliance with the above limits **in conjunction with the Condition D.1.6 (Removal of Rolling Mill #15) and the Condition D.1.7 (Raw Material Change)** shall limit the net emissions of PM, PM<sub>10</sub>, and VOC to less than 25, 15, and 40 tons per year, respectively and render 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable to the 2001 modification to reactivate the Rolling Mill #16 (~~Unit 003~~).

The mist eliminator equipped on Rolling Mill #16 for droplet phase VOC and particulate (droplet phase VOC) emissions control shall be in operation and control emissions at all times when Rolling Mill #16 is in operation.

**D-1.7D.1.6 Removal of Emission Sources Rolling Mill #15 [326 IAC 2-2]**

Rolling Mill #15 (~~Unit 002~~) must be permanently removed from service (prior to full time operation of Rolling Mill #16 (~~Unit 003~~)) in order to provide necessary emission credits to make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

This shakedown period shall not exceed six (6) months. During this shakedown period Rolling Mill #15 (~~Unit 002~~) and Rolling Mill #16 (~~Unit 003~~) shall not operate more than a combined 168 hours per week (starting on the first day of the shakedown period). This limitation is needed because Novelis is relying on the emission reduction from Rolling Mill #15 (~~Unit 002~~) in order to make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable. This limitation effectively limits the total emissions because the Rolling Mill #16 (~~Unit 003~~) is larger than the Rolling Mill #15 (~~Unit 002~~).

**D-1.8D.1.7 Raw Material Change [326 IAC 2-2]**

**Pursuant to Agreed Order Case No. 2010-19487-A and in order to render 326 IAC 2-2 not applicable, the Existing existing** Rolling Mill #20 (~~Unit 005~~) shall be permanently converted from utilizing mineral spirits as the raw material for the "doubling process" to utilizing Norpar 13 (or its equivalent) for that purpose prior to any operation of Rolling Mill #16. (~~Unit 003~~). This change provides necessary emission credits to make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

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

This source is subject to 326 IAC 2-6 (Emission Reporting) because it is required to have an operating permit pursuant to 326 IAC 2-7 (Part 70). The potential to emit of VOC is greater than 250 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, 2015 and every year thereafter. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

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

This source is subject to the opacity limitations specified in 326 IAC 5-1-5-1-2(1).

**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 6.5 (PM Limitations Except Lake County)**

This source is subject to 326 IAC 6.5 because it is located in Vigo County, its PM PTE (or limited PM PTE) is equal to or greater than 100 tons/year or actual emissions are greater than 10 tons/year. However, this source is not one of the sources specifically listed in 326 IAC 6.5-2 through 326 IAC 6.5-10. Therefore, 326 IAC 6.5-1-2(a) applies.

(a) Pursuant to 326 IAC 6.5-1-2(a), the particulate matter (PM) emissions from the facilities listed below shall not exceed 0.03 grains per dry standard cubic foot.

- (a) FP1 Rolling Mill
- (b) Rolling Mill #16
- (c) Rolling Mill #19
- (d) Rolling Mill #20
- (e) Coil Annealing Furnace #1
- (f) Coil Annealing Furnace #2
- (g) Coil Annealing Furnace #3
- (h) Coil Annealing Furnace #4
- (i) Coil Annealing Furnace #48
- (j) Coil Annealing Furnace #49
- (k) Coil Annealing Furnace #54
- (l) Fire Pump Diesel Engine (EG)

**Insignificant Activities**

- (b) Welding for Maintenance Use
- (c) Five (5) sets of O2/acetylene cutting torches
- (d) Wood Working Operation related non-Production activities
- (e) Core cutting Trimmer and Edge Trim System

The mist eliminators and demister pads for particulate (droplet phase VOC) control shall be in operation and control emissions at all times when FP1 Rolling Mill, Rolling Mill #16, Rolling Mill #19 and Rolling Mill #20 are in operation.

The cartridge dust collector for particulate control shall be in operation and control emissions at all times when Core cutting Trimmer and Edge Trim System are in operation.

The cyclone for particulate control shall be in operation and control emissions at all times when Wood Working Operation is in operation.

(b) Pursuant to 326 IAC 6.5-1-2(b)(3), the particulate matter (PM) emissions from the following insignificant activity shall not exceed 0.01 grains per dry standard cubic foot:

- (a) Natural gas-fired Space heaters, process heaters, heat treat furnaces, and boilers (boilers are specified below) with heat input equal to or less than ten million (10,000,000) British thermal units per hour.

<b>Boiler</b>	<b>MMBTU/hr</b>
Office Bldg. Basement	5.20
Water Elevtd. Tank Boiler Hse	1.56
Soluble Oil Farm	8.37
Water Pump House	2.00
Lab Building	2.08

## State Rule Applicability – Individual Facilities

### 326 IAC 8 (VOC Rules)

#### FP1 Rolling Mill

Pursuant to PC 84-174-00001 and 326 IAC 8-1-6, General Reduction Requirement, the Permittee shall comply with the updated BACT as specified below. (Note: The BACT specified in the existing permit for FP1 Rolling Mill have been updated for clarification purpose. IDEM has determined that this update does not require BACT reopening. Deleted language appears as ~~strike throughs~~ and new language appears in **bold**.)

- (a) The Permittee shall use **low volatility oil** (Norpar 15 rolling oil, Linpar 1416-V rolling oil, or its equivalent) in the FP1 Rolling Mill.
- (b) The removal efficiency of the mist eliminator shall be greater than 72%.
- (c) **The VOC emissions from the FP1 Rolling Mill shall be limited to less than 123.3 tons per twelve (12) consecutive month period with compliance determined at the end of each month.**

Note: The limit specified in paragraph (c) above is not a new applicable requirement. This requirement for FP1 Rolling Mill was established in TV Permit No. 167-5988-00001, issued on June 30, 1999. However, this requirement was inadvertently removed from the permit when Significant Permit Modification No. 167-30519-00001 was issued on December 29, 2011.

In order to ensure compliance with this BACT, the mist eliminator for droplet phase VOC control shall be in operation and control emissions at all times when FP1 Cold Rolling Mill is in operation.

#### Rolling Mill #16

Pursuant to 326 IAC 8-1-6 (BACT) (established in year 2004 through SSM No. 167-12146-00001), the Permittee shall install and operate BACT for Rolling Mill #16 for VOC emissions. The BACT has been determined to be a combination of utilizing a low volatility oil (Norpar 13 or Linpar 1416-V or equivalent) and a control device (mist eliminator - controlling droplet phase VOC mist (PM) emissions (down to 1 micron) by 75%).

In order to ensure compliance with this BACT, the mist eliminator for droplet phase VOC control shall be in operation and control emissions at all times when Rolling Mill #16 is in operation.

#### Rolling Mill #19 and Rolling Mill #20

These Rolling Mills are not subject to the requirements of 326 IAC 8-1-6 because they were constructed before January 1, 1980, and are not modified after January 1, 1980. There are no other limits or standards are specified 326 IAC 8 (VOC Rules) for these operations.

#### Coil Annealing Furnaces #1, #2, #3, #4, #48, #49 and #54

Coil Annealing Furnaces ( #1, #2, #3, #4, #48, #49, #54) are not subject to the requirements of 326 IAC 8-1-6 because each of these furnaces has potential VOC emissions less than 25 tons per year. There are no other limits or standards are specified 326 IAC 8 (VOC Rules) for these operations.

#### Two (2) 300 gallon diesel fuel, One (1) 500 gallon diesel fuel and One (1) 350 Kerosene Storage tanks

These tanks are not subject to the requirements of 326 IAC 8-1-6 because each of these tanks has potential VOC emissions less than 25 tons per year. These tanks are also not subject to 326 IAC 8-4-6 (Gasoline dispensing facilities) because diesel fuel and kerosene are not considered motor vehicle fuels under this rule and therefore these tanks are not considered as Gasoline

dispensing facilities. No other limits or standards are specified in 326 IAC 8 (VOC Rules) for these operations.

One (1) 300 gallon gasoline tank

This tank is not subject to the requirements of 326 IAC 8-1-6 because this tank has potential VOC emissions less than 25 tons per year. This tank is not subject to the requirements 326 IAC 8-4-6 because it has a monthly gasoline throughput less than 10,000 gallons per month. No other limits or standards are specified in 326 IAC 8 (VOC Rules) for this operation.

Eight (8) cold cleaner degreasers for Parts Washers and one (1) Bearing Washer

These emission units are not subject to the requirements of 326 IAC 8 (VOC Rules) because potential VOC emissions from each of these emission units are less than 15 pounds per day.

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

Each facility at this source has potential HAP emissions less than 10 and 25 tons per year for single and combined HAPs, respectively. Therefore, 326 IAC 2-4.1 does not apply to any facility at this source.

<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

The VOC emissions from the FP1 Rolling Mill for the PSD Minor Limit specified for FP1 Rolling Mill in 'State Rule Applicability - Entire Source' and 326 IAC 8-1-6 BACT limit specified for FP1 Rolling Mill in 'State Rule Applicability – Individual Facilities' section of this TSD shall be calculated as follows:

$$E = [ O_i - O_p - O_o ] \times EF_C / 2000 \text{ lb/ton}$$

Where:

E = VOC emissions from the FP1 Rolling Mill, ton/month

O<sub>i</sub> = All coolant purchased for use on the FP1 Rolling Mill, gal/month

O<sub>p</sub> = All coolant in process on the FP1 Rolling Mill, gal/month

O<sub>o</sub> = All coolant from the FP1 Rolling Mill that have been sent offsite for oil recycling/waste disposal, gal/month

EF<sub>C</sub> = 6.4 lb VOC/gal coolant or the actual VOC content per gallon of coolant used

Testing Requirements

Emission Unit	Control Device	Pollutant/Parameter	Frequency of Testing	most recent compliance test date
FP1 Rolling Mill	mist eliminator	droplet phase VOC removal efficiency*	once every five (5) years from the date of the valid compliance demonstration	January 6, 2010
Rolling Mill #16	mist eliminator	PM	once every five (5) years from the date of the valid compliance demonstration	September 29, 2010
		PM10		
		VOC **		
Rolling Mill #16	mist eliminator	droplet phase VOC removal efficiency*	once every five (5) years from the date of the valid compliance demonstration	September 29, 2010

\* Particulate (which is the Droplet Phase VOC)  
 During the rolling process, coolant oil is applied to aluminum sheet to cool and lubricate the aluminum as it passes through the mills. Some of this coolant oil is evaporated creating droplet phase and vapor phase hydrocarbon emissions. The mist eliminators, equipped on FP1 Rolling Mill and Rolling Mill #16, remove droplet phase hydrocarbon.

\*\* IDEM has added VOC (including droplet phase, which is in particulate form and vapor phase hydrocarbon) testing for Rolling Mill #16 through this renewal. This test was performed by the source on August 9, 2010 and was an IDEM approved test.

Compliance Monitoring Requirements

Emission Units	Control	Parameter	Frequency
FP1 Rolling Mill	mist eliminator	Visible Emissions notation	Daily
Rolling Mill #16	mist eliminator		
Rolling Mill #19	demister pad		
Rolling Mill #20	demister pad		

These monitoring conditions are necessary because the mist eliminators and demister pads must operate properly to ensure compliance with 326 IAC 2-2, 326 IAC 6.5-1-2, 326 IAC 8-1-6, 326 IAC 2-7 and CAM.

**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 February 15, 2013.

<b>Conclusion</b>
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The operation of this stationary source which consists of production equipment to reduce aluminum rolls into finished aluminum coils for foil products shall be subject to the conditions of the attached Part 70 Operating Permit Renewal No. T167-32837-00001.

<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 IGCM 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

Company Name: Novelis Corporation  
 Address City IN Zip: 5901 North 13th Street, Terre Haute, Indiana 47805  
 Part 70 Operating Permit Renewal No.: T167-32837-00001  
 Reviewer: Mehul Sura  
 Application Received: 2/15/2013

uncontrolled (tons/yr)										
	PM	PM10	PM2.5	SO2	NOx	VOC	CO	GHGs	Total HAPs	Worst Single HAP
FP1 Rolling Mill	70.08	70.08	70.08	-	-	650.27	-	-	-	-
#16 Rolling Mill	22.19	22.19	22.19	-	-	1269.71	-	-	-	-
#19 Rolling Mill	86.86	86.86	86.86	-	-	839.96	-	-	-	-
#20 Rolling Mill	86.86	86.86	86.86	-	-	700.78	-	-	-	-
Coil Annealing Furnace #1	0.11	0.46	0.46	0.04	6.04	12.91	5.07	7,288	0.01	0.01
Coil Annealing Furnace #2	0.11	0.46	0.46	0.04	6.03	12.91	5.07	7,280	0.01	0.01
Coil Annealing Furnace #3	0.11	0.46	0.46	0.04	6.02	12.91	5.06	7,273	0.01	0.01
Coil Annealing Furnace #4	0.11	0.46	0.46	0.04	6.02	12.91	5.06	7,266	0.01	0.01
Coil Annealing Furnace #48	0.14	0.56	0.56	0.04	7.33	6.45	5.07	8,852	0.01	0.01
Coil Annealing Furnace #49	0.11	0.45	0.45	0.04	5.97	6.45	5.07	7,202	0.01	0.01
Coil Annealing Furnace #54	0.12	0.49	0.49	0.04	6.42	6.45	5.06	7,754	0.01	0.01
Natural Gas Boilers	0.16	0.63	0.63	0.05	6.04	0.45	6.93	9,959	0.01	0.01
Natural Gas Heaters	0.51	2.02	2.02	0.16	26.61	1.46	22.35	32122.97	0.01	0.01
Fire Pump Diesel Engine	0.20	0.20	0.20	0.18	2.75	0.22	0.59	102.40	0.00	0.00
Wood Working Operation	0.31	0.31	0.31	-	-	-	-	-	-	-
Eight (8) cold cleaner degreasers and one (1) bearing washer	-	-	-	-	-	2.970	-	-	-	-
<b>Total</b>	<b>267.98</b>	<b>272.46</b>	<b>272.46</b>	<b>0.65</b>	<b>79.22</b>	<b>3536.80</b>	<b>65.32</b>	<b>95100.10</b>	<b>0.09</b>	<b>0.09</b>

controlled/limited (tons/yr)										
	PM	PM10	PM2.5	SO2	NOx	VOC	CO	GHGs	Total HAPs	Worst Single HAP
FP1 Rolling Mill	67.58	67.58	67.58	-	-	123.30	-	-	-	-
#16 Rolling Mill	30.41	30.41	30.41	-	-	292.68	-	-	-	-
#19 Rolling Mill	30.41	30.41	30.41	-	-	839.96	-	-	-	-
#20 Rolling Mill	30.41	30.41	30.41	-	-	700.78	-	-	-	-
Coil Annealing Furnace #1	0.11	0.46	0.46	0.04	6.04	12.91	5.07	7287.51	0.01	0.01
Coil Annealing Furnace #2	0.11	0.46	0.46	0.04	6.03	12.91	5.07	7280.40	0.01	0.01
Coil Annealing Furnace #3	0.11	0.46	0.46	0.04	6.02	12.91	5.06	7273.30	0.01	0.01
Coil Annealing Furnace #4	0.11	0.46	0.46	0.04	6.02	12.91	5.06	7266.22	0.01	0.01
Coil Annealing Furnace #48	0.14	0.56	0.56	0.04	7.33	6.45	5.07	8852.19	0.01	0.01
Coil Annealing Furnace #49	0.11	0.45	0.45	0.04	5.97	6.45	5.07	7202.42	0.01	0.01
Coil Annealing Furnace #54	0.12	0.49	0.49	0.04	6.42	6.45	5.06	7753.65	0.01	0.01
Natural Gas Boilers	0.16	0.63	0.63	0.05	6.04	0.45	6.93	9959.04	0.01	0.01
Natural Gas Heaters	0.51	2.02	2.02	0.16	26.61	1.46	22.35	32122.97	0.01	0.01
Fire Pump Diesel Engine	0.20	0.20	0.20	0.18	2.75	0.22	0.59	102.40	0.0024	0.0024
Wood Working Operation	0.31	0.31	0.31	-	-	-	-	-	-	-
Eight (8) cold cleaner degreasers and one (1) bearing washer	-	-	-	-	-	2.970	-	-	-	-
<b>Total</b>	<b>160.80</b>	<b>165.29</b>	<b>165.29</b>	<b>0.65</b>	<b>79.22</b>	<b>2032.80</b>	<b>65.32</b>	<b>95100.10</b>	<b>0.09</b>	<b>0.09</b>

Appendix A - Emission Calculations  
Coolant Usage

Company Name: Novelis Corporation  
 Address City IN Zip: 5901 North 13th Street, Terre Haute, Indiana 47805  
 Part 70 Operating Permit Renewal No.: T167-32837-00001  
 Reviewer: Mehul Sura  
 Application Received: 2/15/2013

Month	Rolling Mill #16 , Rolling Mill #19 and Rolling Mill #20 (combined)		FP1 Rolling Mill	
	Coolant Usage (gal)	Total Al Metal Processed (lb)	Coolant Usage (gal)	Total Al Metal Processed (lb)
Jan-08	13937	25,591,000	13780	55,187,000
Feb-08	13953	25,941,000	13609	58,461,000
Mar-08	20489	27,484,000	0	57,972,000
Apr-08	26945	27,018,000	6843	54,462,000
May-08	7049	28,091,000	0	58,001,000
Jun-08	26774	23,352,000	0	43,826,000
Jul-08	10291	27,167,000	13588	54,075,000
Aug-08	13603	26,917,000	0	61,005,000
Sep-08	20489	26,390,000	6756	58,701,000
Oct-08	27926	24,630,000	0	62,599,000
Nov-08	13808	24,440,000	25055	52,969,000
Dec-08	6951	18,741,000	0	38,644,000
<b>Subtotal</b>	<b>202,215</b>	<b>305,762,000</b>	<b>79,631</b>	<b>655,902,000</b>
Jan-09	20848	21134000	0	50,815,000
Feb-09	6948	15233000	0	32,590,000
Mar-09	13795	20407000	0	40,765,000
Apr-09	18951	23070000	22391	51,747,000
May-09	13641	23140000	6598	60,842,000
Jun-09	13394	22656000	13543	57,107,000
Jul-09	13544	26343000	6740	54,954,000
Aug-09	20397	26912000	6684	61,394,000
Sep-09	13781	22319000	20331	54,151,000
Oct-09	19618	26211000	13566	53,722,000
Nov-09	13764	23194000	0	50,166,000
Dec-09	26826	16493000	6744	40,986,000
<b>Subtotal</b>	<b>195,507</b>	<b>267,112,000</b>	<b>96,597</b>	<b>609,239,000</b>
Jan-10	20713	24411000	0	48,946,000
Feb-10	14059	23723000	0	49,694,000
Mar-10	27141	24575000	26428	49,643,000
Apr-10	20827	24318000	0	53,845,000
May-10	13948	25574000	0	52,452,000
Jun-10	13658	23958000	0	54,895,000
Jul-10	30943	24263000	6653	55,696,000
Aug-10	24093	23523000	2884	48,660,000
Sep-10	34801	25589000	11824	50,899,000
Oct-10	20307	27582000	0	52,860,000
Nov-10	21369	25395000	25456	48,862,000
Dec-10	13671	20821000	0	39,528,000
<b>Subtotal</b>	<b>255,530</b>	<b>293,732,000</b>	<b>73,245</b>	<b>605,980,000</b>
Jan-11	18402	25033000	1879	47,696,000
Feb-11	13303	23270000	7048	45,637,000
Mar-11	11230	25774000	1961	54,328,000
Apr-11	16544	24295000	2881	51,510,000
May-11	6850	22427000	0	53,638,000
Jun-11	9521	20232000	9894	57,287,000
Jul-11	11388	21515000	8424	47,819,000
Aug-11	20541	26077000	12667	59,771,000
Sep-11	26743	25669000	6703	57,800,000
Oct-11	6798	13080000	0	54,978,000
Nov-11	0	10518000	0	35,454,000
Dec-11	5961	7564000	9874	25,513,000
<b>Subtotal</b>	<b>147,281</b>	<b>245,454,000</b>	<b>61,331</b>	<b>591,431,000</b>
Jan-12	27613	20000000	6206	51,143,000
Feb-12	13158	21939000	13105	50,604,000
Mar-12	18207	25562000	13637	58,417,000
Apr-12	11447	16881000	7985	51,383,000
May-12	22444	14953000	6524	54,064,000
Jun-12	8195	20576000	5288	56,679,000
Jul-12	10219	23608000	2073	58,434,000
Aug-12	15052	23269000	4968	59,397,000
Sep-12	10279	28100000	13115	57,946,000
Oct-12	12988	17931000	13386	59,258,000
Nov-12	1562	11177000	11821	43,903,000
Dec-12	13420	15724000	0	56,971,000
<b>Subtotal</b>	<b>164,584</b>	<b>239,720,000</b>	<b>98,108</b>	<b>658,199,000</b>

	Average Coolant Usage Rate (gal/lb)	
	Rolling Mill #16 , Rolling Mill #19 and Rolling Mill #20	FP1 Rolling Mill
Year 2008	0.00066	0.00012
Year 2009	0.00073	0.00016 *
Year 2010	0.00087 *	0.00012
Year 2011	0.00060	0.00010
Year 2012	0.00069	0.00015

**Methodology**

Coolant Usage (gal) and Al Metal Processed (lb) information is supplied by the source.

Average Coolant Usage Rate (gal/lb) for a given year = Subtotal Coolant Usage (gal) for a given year / Subtotal Al Metal Processed (lb) for a given year

\* Highest coolant usage rate. These usage rates have been used to determine VOC uncontrolled emissions rates.

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**VOC Emissions**

Emission Unit	Coolant Material***	Density of Coolant (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Non-Volatiles (solids)	Coolant Usage Rate (gal/lb of Al)	Throughput Rate (lb of Al/hr)	Potential VOC Emissions (lb/hr)	Potential VOC Emissions (tons/yr)	PSD Minor Limit (tons/yr)	PSD Minor Limit (lb/hr)	Limited Hours of Operation (hrs/yr)	VOC Limited PTE (tons/yr)
FP1 Rolling Mill	LINPAR® 1416-V Normal Paraffin	6.4	100.00%	0.0%	100.0%	0.00%	0.00016	146,120	148.46	650.27	123.3*	-	-	123.3*
Rolling Mill #16	LINPAR® 1416-V Normal Paraffin	6.4	100.00%	0.0%	100.0%	0.00%	0.00087	52,000	289.89	1269.71	-	81.30 **	7200	292.68
Rolling Mill #19	LINPAR® 1416-V Normal Paraffin	6.4	100.00%	0.0%	100.0%	0.00%	0.00087	34,400	191.77	839.96	-	-	-	839.96
Rolling Mill #20	LINPAR® 1416-V Normal Paraffin	6.4	100.00%	0.0%	100.0%	0.00%	0.00087	28,700	160.00	700.78	-	-	-	700.78

**Methodology**

\* Existing VOC PSD Minor Limit for FP1 Rolling Mill.

\*\* Existing VOC PSD Minor Limit for Rolling Mill #16.

\*\*\* Some of this coolant evaporates, creating droplet phase and vapor phase hydrocarbon emissions. The droplet phase emissions are controlled by the mist eliminators. There are no control for the vapor phase VOC.

Potential VOC Emissions (lb/hr) = Throughput Rate (lb of Al/hr) x Coolant Usage Rate (gal/lb of Al) x Density of Coolant (Lb/Gal)

Potential VOC Emissions (tons/yr) = Potential VOC Emissions (lb/hr) x 8760 (hrs/yr) x 1/2000 (lbs/ton)

Rolling Mill #16 VOC Limited PTE (tons/yr) = PSD Minor Limit (lb/hr) x Limited Hours of Operation (hrs/yr) x 1/2000 (lbs/ton)

Rolling Mill #19 and Rolling Mill #20 VOC Limited PTE (tons/yr) = Potential VOC Emissions (tons/yr)

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**FP1 Rolling Mill**

Pollutant	Emission Factor (lb/hr)	Control	Source of Emission Factor	Control Efficiency (%)	Controlled Emissions (tons/yr)	Uncontrolled Emissions (tons/yr)	326 IAC 6.5-1-2 limit (grain/acfm)	air flow rate (acfm)	PTE based on 326 IAC 6.5-1-2 limit (tons/yr)
PM (droplet phase VOC)	2.40 (after control)	mist eliminator	January 6, 2010 compliance test	84.5%	10.51	70.08	0.03	60000	67.6
PM10	2.40 (after control)	mist eliminator	All PM is assumed to be PM10	84.5%	10.51	70.08	0.03	60000	67.6

**Methodology:**

Control Efficiency based on January 6, 2010 compliance test performed for FP1 Rolling Mill.

Controlled Emissions (tons/yr) = Emission Factor (lb/hr) x 8760 (hrs/yr) / 2000 (lbs/ton)

Uncontrolled (tons/yr) = Controlled Emissions (tons/yr) / (1-Control Efficiency)

PTE based on 326 IAC 6.5-1-2 limit (tons/yr) = 326 IAC 6.5-1-2 limit (grain/acfm) x air flow rate (acfm) x 60 (min/hr) x 8760 (hrs/yr) / [7000 (grain/lb) x 2000 (lbs/ton)]

**#16 Rolling Mill**

Pollutant	Emission Factor (lb/hr)	Control	Source of Emission Factor	Control Efficiency (%)	Controlled Emissions (tons/yr)	Uncontrolled Emissions (tons/yr)	326 IAC 6.5-1-2 limit (grain/acfm)	air flow rate (acfm)	PTE based on 326 IAC 6.5-1-2 limit (tons/yr)	326 IAC 2-2 limit (lb/hr)	PTE based on 326 IAC 2-2 limit (tons/yr)
PM (droplet phase VOC)	0.76 (after control)	mist eliminator	September 29, 2010 compliance test	84.3%	3.33	22.19	0.03	27000	30.4	8.82	38.6316
PM10	0.76 (after control)	mist eliminator	All PM is assumed to be PM10	84.3%	3.33	22.19	0.03	27000	30.4	5.57	24.3966

**Methodology:**

Control Efficiency based on August 9, 2010 compliance test performed for #16 Rolling Mill.

Controlled Emissions (tons/yr) = Emission Factor (lb/hr) x 8760 (hrs/yr) / 2000 (lbs/ton)

Uncontrolled (tons/yr) = Controlled Emissions (tons/yr) / (1-Control Efficiency)

PTE based on 326 IAC 6.5-1-2 limit (tons/yr) = 326 IAC 6.5-1-2 limit (grain/acfm) x air flow rate (acfm) x 60 (min/hr) x 8760 (hrs/yr) / [7000 (grain/lb) x 2000 (lbs/ton)]

PTE based on 326 IAC 2-2 limit (tons/yr) = 326 IAC 2-2 limit (lb/hr) x 8760 (hrs/yr) / 2000 (lbs/ton)

**#19 Rolling Mill and #20 Rolling Mill**

Rolling Mills #19 and #20 are identical units. The emissions in the table below represent each

Pollutant	Emission Factor (lb/hr)	Control	Source of Emission Factor	Control Efficiency (%)	Controlled Emissions (tons/yr)	Uncontrolled Emissions (tons/yr)	326 IAC 6.5-1-2 limit (grain/acfm)	air flow rate (acfm)	PTE based on 326 IAC 6.5-1-2 limit (tons/yr)
PM (droplet phase VOC)	19.83 (before control)	mesh pad filter	derived from December 20, 2000 engineering study performed by the source	84.5%	13.03	86.86	0.03	27000	30.4
PM10	19.83 (before control)	mesh pad filter	All PM is assumed to be PM10	84.5%	13.03	86.86	0.03	27000	30.4

**Methodology:**

Control Efficiency based on January 6, 2010 compliance test performed for FP1 Rolling Mill.

Controlled Emissions (tons/yr) = Emission Factor (lb/hr) x 8760 (hrs/yr) / 2000 (lbs/ton)

Uncontrolled (tons/yr) = Controlled Emissions (tons/yr) / (1-Control Efficiency)

PTE based on 326 IAC 6.5-1-2 limit (tons/yr) = 326 IAC 6.5-1-2 limit (grain/acfm) x air flow rate (acfm) x 60 (min/hr) x 8760 (hrs/yr) / [7000 (grain/lb) x 2000 (lbs/ton)]

**Company Name:** Novelis Corporation  
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	Furnace 48, 49 and 54	Furnaces 1,2,3 and 4
<b>Furnace Capacity</b>		
Rated Capacity:	150,000 lbs	135,000 lbs
Density of Aluminum:	0.1 lb/in <sup>3</sup>	0.1 lb/in <sup>3</sup>
Maximum Capacity:	1,500,000 in <sup>3</sup>	1,350,000 in <sup>3</sup>

<b>Coil Properties</b>		
Average Gauge of Coil:	0.00065 in	0.003 in
Total Area of Coils in Furnace:	2,307,692,308 in <sup>2</sup>	450,000,000 in <sup>2</sup>
Total Area of Coils in Furnace:	16,025,641.03 ft <sup>2</sup>	3,125,000 ft <sup>2</sup>
Residual Oil on Coil <sup>1</sup> :	0.000002205 lb oil/ft <sup>2</sup>	0.0000132 lb oil/ft <sup>2</sup>
Residual Oil per Furnace Load:	35.34 lb oil/fce load	41.25 lb oil/fce load
Minimum Furnace Cycle Time:	24 hrs	14 hrs
Maximum Operating Schedule:	8760 hrs/yr	8760 hrs/yr

Note 1: Residual Oil on coil determined from testing during original 1996 Title V permit application.

**VOC Emissions<sup>2</sup>**

Source		Maximum Emissions (each furnace)	
		lbs/hr	TPY
Coil Annealing Furnace #1	006	2.95	12.91
Coil Annealing Furnace #2	007	2.95	12.91
Coil Annealing Furnace #3	008	2.95	12.91
Coil Annealing Furnace #4	013	2.95	12.91
Coil Annealing Furnace #48	009	1.47	6.45
Coil Annealing Furnace #49	010	1.47	6.45
Coil Annealing Furnace #54	011	1.47	6.45

Note 2: A small percentage of the oil remains on the coil depending on the final product. However, the VOC emission calculations assumes that 100% of the residual oil on the coil is emitted.

Maximum Emissions (lb/hr) = Residual Oil per Furnace Load (lb oil/fce load) / Minimum Furnace Cycle Time (hrs)

Maximum Emissions (TPY) = Maximum Emissions (lb/hr) \* 8760 (hrs/yr) / 2000 (lbs/ton)

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Heat Input Capacity HHV Potential Throughput  
 MMBtu/hr mmBtu MMCF/yr  
 mmscf

Emission Unit Location	Total Input MMBTU/hr
Natural Gas	
Ice Bldg. Basem	5.20
Elevat. Tank Bldg	1.56
Soluble Oil	8.37
Water Pump	2.00
Lab Building	2.08
Subtotal	19.21
Natural Gas	
Office Building	0.04
Lab Building	0.08
Sheet Office	0.15
Natural Gas	
#5 Recirc.	0.12
Elevated Water	0.30
#4 Recirc.	0.16
Soluble Oil	0.16
Water Pump	0.16
Water Pump	0.25
Yard	0.05
Yard	0.05
Electrical Sub.	0.13
Fire House	0.17
Fire House	0.17
West Roll Grnd	0.30
West Roll Grnd	0.25
West Roll Grnd	0.25
Scrap Handling	0.31
Bay 18 Building	0.16
Carpenter Shop	0.30
Pallet Storage	0.30
Pallet Storage	0.30
Bay 1 (X49 column)	0.25
Bay 1 (X44)	0.25
Bay 11 (Coil)	2.00
Hose Mandrel	0.25
Hose Mandrel	0.25
North wall of	0.30
Door 6 - Heater	6.00
Door 15 -	1.90
Stores (Above)	0.16
Stores (West)	0.16
Upright	0.16
Maintenance	9.16
Rooftop	
Col Line UC-1C	3.00
Col Line M-1C	3.25
Col Line J-7	3.01
Col Line J-21	3.01
Col Line J-27	3.01
Col Line J-31	3.01
Col Line J-39	3.01
Col Line J-4	8.50
Col Line B-22	5.46
Natural Gas	
S. W. Extator	0.17
Fire House	0.05
Sub Total	61.96
Natural Gas	
#48 Anneal Furnace	13.92
#49 Anneal Furnace	13.92
#54 Anneal Furnace	15.00
#1 Coil Anneal Furnace	14.11
#2 Coil Anneal Furnace	14.11
#3 Coil Anneal Furnace	14.11
#4 Coil Anneal Furnace	14.11

	19.21	1020	165.0
Natural Gas Boilers	19.21	1020	165.0
Natural Gas Heaters	61.96	1020	532.1
#48 Anneal Furnace	17.08	1020	146.6
#49 Anneal Furnace	13.92	1022	119.3
#54 Anneal Furnace	15.00	1023	128.4
#1 Coil Anneal Furnace	14.11	1024	120.7
#2 Coil Anneal Furnace	14.11	1025	120.6
#3 Coil Anneal Furnace	14.11	1026	120.5
#4 Coil Anneal Furnace	14.11	1027	120.4
Boiler 08	19.21	1020	165.0
Total	202.83		

Emission Factor in lb/MMCF	Pollutant (tons/yr)							
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO	
Natural Gas Boilers	0.0019	1.9	7.6	0.0075	0.6	100 **	5.5	84
Natural Gas Heaters	0.157	0.157	0.6	0.0075	0.6	0.006	0.0054	0.0824
#48 Anneal Furnace	0.139	0.139	0.6	0.0075	0.6	0.006	0.0054	0.0824
#49 Anneal Furnace	0.113	0.113	0.5	0.0075	0.6	0.006	0.0054	0.0824
#54 Anneal Furnace	0.122	0.122	0.5	0.0075	0.6	0.006	0.0054	0.0824
#1 Coil Anneal Furnace	0.115	0.115	0.5	0.0075	0.6	0.006	0.0054	0.0824
#2 Coil Anneal Furnace	0.115	0.115	0.5	0.0075	0.6	0.006	0.0054	0.0824
#3 Coil Anneal Furnace	0.114	0.114	0.5	0.0075	0.6	0.006	0.0054	0.0824
#4 Coil Anneal Furnace	0.114	0.114	0.5	0.0075	0.6	0.006	0.0054	0.0824
Boiler 08	0.157	0.157	0.6	0.0075	0.6	0.006	0.0054	0.0824
Total	1.652	1.652	6.607	6.607	0.522	86.935	4.781	73.025

\*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.  
 \*\*Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

**Methodology**

All emission factors are based on normal firing.  
 MMBtu = 1,000,000 Btu  
 MMCF = 1,000,000 Cubic Feet of Gas  
 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

**HAPs Emissions**

Emission Factor in lb/MMcf	HAPs - Organics (tons/yr)				
	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Natural Gas Boilers	1.732E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Natural Gas Heaters	5.588E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
#48 Anneal Furnace	1.540E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
#49 Anneal Furnace	1.253E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
#54 Anneal Furnace	1.349E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
#1 Coil Anneal Furnace	1.268E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
#2 Coil Anneal Furnace	1.268E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
#3 Coil Anneal Furnace	1.265E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
#4 Coil Anneal Furnace	1.264E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Boiler 08	1.732E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Total	0.002	0.000	0.000	0.000	0.000

**HAPs - Metals (tons/yr)**

Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
	Natural Gas Boilers	4.125E-05	9.074E-05	1.155E-04	3.135E-05
Natural Gas Heaters	1.330E-04	2.927E-04	3.725E-04	1.011E-04	5.588E-04
#48 Anneal Furnace	3.666E-05	8.065E-05	1.027E-04	2.786E-05	1.540E-04
#49 Anneal Furnace	2.983E-05	6.562E-05	8.352E-05	2.267E-05	1.253E-04
#54 Anneal Furnace	3.211E-05	7.065E-05	8.991E-05	2.440E-05	1.349E-04
#1 Coil Anneal Furnace	3.018E-05	6.640E-05	8.451E-05	2.294E-05	1.268E-04
#2 Coil Anneal Furnace	3.015E-05	6.633E-05	8.442E-05	2.292E-05	1.268E-04
#3 Coil Anneal Furnace	3.012E-05	6.627E-05	8.434E-05	2.289E-05	1.265E-04
#4 Coil Anneal Furnace	3.009E-05	6.620E-05	8.426E-05	2.287E-05	1.264E-04
Boiler 08	4.125E-05	9.074E-05	1.155E-04	3.135E-05	1.732E-04
Total	0.00043	0.00096	0.00122	0.00033	0.00183

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.

**Greenhouse Gas Emissions**

Emission Factor in lb/MMcf	Greenhouse Gas (tons/yr)		
	CO2 120,000	CH4 2.3	N2O 2.2
Natural Gas Boilers	9,899	0.2	0.2
Natural Gas Heaters	31,925	0.6	0.6
#48 Anneal Furnace	8,799	0.2	0.2
#49 Anneal Furnace	7,159	0.1	0.1
#54 Anneal Furnace	7,707	0.1	0.1
#1 Coil Anneal Furnace	7,243	0.1	0.1
#2 Coil Anneal Furnace	7,238	0.1	0.1
#3 Coil Anneal Furnace	7,229	0.1	0.1
#4 Coil Anneal Furnace	7,222	0.1	0.1
Boiler 08	9,899	0.2	0.2
Natural Gas Boilers		9,959	
Natural Gas Heaters		32,123	
#48 Anneal Furnace		8,852	
#49 Anneal Furnace		7,202	
#54 Anneal Furnace		7,754	
#1 Coil Anneal Furnace		7,288	
#2 Coil Anneal Furnace		7,280	
#3 Coil Anneal Furnace		7,273	
#4 Coil Anneal Furnace		7,266	
Boiler 08		9,959	
Total		104,957	

**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 (21) + N2O Potential Emission ton/yr x N2O GWP (310).

**Appendix A: Emission Calculations  
Fire Pump Diesel Engine  
Output Rating (<=600 HP)**

Company Name: Novelis Corporation  
Address City IN Zip: 5901 North 13th Street, Terre Haute, Indiana 47805  
Part 70 Operating Permit Renewal No.: T167-32837-00001  
Reviewer: Mehul Sura  
Application Received: 2/15/2013

**Emissions calculated based on output rating (hp)**

Total Output Horsepower Rating (hp)	355.0
Maximum Hours Operated per Year	500
Potential Throughput (hp-hr/yr)	177,500

	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	0.20	0.20	0.20	0.18	2.75	0.22	0.59

\*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							Total PAH HAPs***
	Benzene	Toluene	Xylene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Acrolein	
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	5.80E-04	2.54E-04	1.77E-04	2.43E-05	7.33E-04	4.76E-04	5.75E-05	1.04E-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>2.41E-03</b>
---	-----------------

**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	1.02E+02	4.11E-03	8.22E-04

<b>Summed Potential Emissions in tons/yr</b>	<b>1.02E+02</b>
<b>CO2e Total in tons/yr</b>	<b>102.40</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 (21) + N2O Potential Emission ton/yr x N2O GWP (310).

**Company Name:** Novelis Corporation  
**Address City IN Zip:** 5901 North 13th Street, Terre Haute, Indiana 47805  
**Part 70 Operating Permit Renewal No.:** T167-32837-00001  
**Reviewer:** Mehul Sura  
**Application Received:** 2/15/2013

**Wood Working Operation**

Emission Rate (lb/ton of material processed)	Throughput (lb of wood/hr)	Uncontrolled Emission Rate (tons/yr)	Cyclone efficiency	Controlled Emission Rate (tons/yr)
1.4	100	0.3066	85%	0.04599

**Methodology**

Emission rate has been provided by the source.

Uncontrolled Emission Rate (tons/yr) = ((Emission Rate (lb/ton of material processed) \* Throughput (lb of wood/hr) / 2000 (lb/ton)) \* 8760 (hrs/yr) / 2000 (lb/ton)

Controlled Emission Rate (tons/yr) = Uncontrolled Emission Rate (tons/yr) \* (1-Cyclone efficiency)

**Eight (8) cold cleaner degreasers and one (1) bearing washer**

Location	Current Content	VOC		Description
		lb/day	tons/yr	
Hose Shop	Crystal Clean Odorless Solvent	1.81	0.33	20 gal capacity
Truck Shop	Crystal Clean Odorless Solvent	1.81	0.33	30 gal capacity
air Compressor Basemr	Crystal Clean Odorless Solvent	1.81	0.33	20 gal capacity
FP1 Backup Area	Crystal Clean Odorless Solvent	1.81	0.33	100 gal capacity
Electric Clean Room	Crystal Clean Odorless Solvent	1.81	0.33	10 gal capacity
Reliability Shop	Crystal Clean Odorless Solvent	1.81	0.33	80 gal capacity
VDU Area	Crystal Clean Odorless Solvent	1.81	0.33	10 gal capacity
West Roll Grind Shop	Crystal Clean Odorless Solvent	1.81	0.33	20 gal capacity
Bearings Washer	95 % Water + 5% Nalco Tech Clean 7610	1.81	0.33	900 gal capacity
		Total	2.97	

**Methodology**

Tons per yr Emission Factors are from AP-42 4.6-2 for Cold Cleaners.

VOC Emission (lb/day) = VOC emissions (tons/yr ) \* 2000 (lbs/ton) / 365 days/yr

**Appendix A - Emission Calculations**  
**FP1 Revised Netting Calculations**

**Company Name:** Novelis Corporation  
**Address City IN Zip:** 5901 North 13th Street, Terre Haute, Indiana 47805  
**Part 70 Operating Permit Renewal No.:** T167-32837-00001  
**Reviewer:** Mehul Sura  
**Application Received:** 2/15/2013

**Historic PTE Emissions from the Installation of FP1 in 1990:**

**Contemporaneous Emissions Changes**

*Historic Netting Determination from 2/15/1989 Construction Permit Application*

	TPY			
	PM	PM10	VOC	
FP-1			83	
Contemporaneous Increase				
Contemporaneous Decrease*			94	
Net			-11	
PSD Significant Mod. Threshold	25	15	40	For existing major sources with regard to PSD Significant
Significant			No	

**Revised Netting Determination**

IDEM requested revised calculations during the 2013 Title V renewal to include PM and PM10 in the above netting determination.

The following changes have been made to the historic netting determination:

After installation and testing of FP1, the mist eliminator was determined to have a control efficiency of 72% and the permit was modified.

These revised netting calculations utilize the BACT limit of 123.3 TPY VOC which was based on the updated droplet phase control efficiency of 72%.

Because PM and PM10 emissions were not evaluated during the initial netting determination for FP1, the results from the 7/19/1994 compliance test were used to develop a ratio of PM to total VOC.

Formula		
12.45	A	lbs droplet phase VOC (PM)/hr
38.72	B	lbs total VOC/hr
32.15%	$= (A/B) \times 100$	Percentage of VOC that is droplet phase VOC (PM)

**Contemporaneous Emissions Changes**

*Updated Netting Determination*

	TPY			
	PM	PM10	VOC	
FP-1	39.65	39.65	123.30 **	
Contemporaneous Increase				
Contemporaneous Decrease*	30.22	30.22	94	
Net	9.42	9.42	29.3	
PSD Significant Mod. Threshold	25	15	40	For existing major sources with regard to PSD Significant
Significant	No	No	No	

\*Contemporaneous decreases are from the shutdown of the #10 Cold Rolling Mill.

\*\* PSD Minor Limit in the permit.

PM PTE of FP-1 = VOC PTE of FP-1 x Percentage of VOC that is droplet phase VOC (PM)

PM10=PM



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**Michael R. Pence**  
*Governor*

**Thomas W. Easterly**  
*Commissioner*

## SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED

TO: Chrissy Taft  
Novelis Corporation  
5901 N 13th St  
Terre Haute, IN 47805

DATE: February 13, 2014

FROM: Matt Stuckey, Branch Chief  
Permits Branch  
Office of Air Quality

SUBJECT: Final Decision  
Title V - Renewal  
167 - 32837 - 00001

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:  
Stanley Miles, Plant Mgr  
Stephanie Madden EHS Technology Group  
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

February 13, 2014

TO: Vigo Co Public Library 1 Library Square Terre Haute IN

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

Subject: **Important Information for Display Regarding a Final Determination**

**Applicant Name: Novelis Corporation**  
**Permit Number: 167 - 32837 - 00001**

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



## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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**Michael R. Pence**  
Governor

**Thomas W. Easterly**  
Commissioner

TO: Interested Parties / Applicant

DATE: February 13, 2014

RE: Novelis Corporation / 167 - 32837 - 00001

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

In order to conserve paper and reduce postage costs, IDEM's Office of Air Quality is now sending many permit decisions on CDs in Adobe PDF format. The enclosed CD contains information regarding the company named above.

This permit is also available on the IDEM website at:  
<http://www.in.gov/ai/appfiles/idem-caats/>

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

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

**Please Note:** *If you feel you have received this information in error, or would like to be removed from the Air Permits mailing list, please contact Patricia Pear with the Air Permits Administration Section at 1-800-451-6027, ext. 3-6875 or via e-mail at [PPEAR@IDEM.IN.GOV](mailto:PPEAR@IDEM.IN.GOV).*

Enclosures  
CD Memo.dot 6/13/2013

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