INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: September 30, 2011

RE: SDI LaFarga, LLC / 003-30250-00384

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 according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

If you have technical questions regarding the enclosed documents, please contact the 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.

Enclosures
FNPER.dot12/03/07

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

New Source Construction and Federally Enforceable State Operating Permit OFFICE OF AIR QUALITY

SDI LaFarga, LLC
1640 South Ryan Road
New Haven, Indiana 46774

(herein known as the Permittee) is hereby authorized to construct and 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. 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 2-8 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.

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a FESOP under 326 IAC 2-8.

Operation Permit No.: F003-30250-00384	
Issued by: Mathew Stuckey ,Chief Permits Branch Office of Air Quality	Issuance Date: September 30, 2011 Expiration Date: September 30, 2016

TABLE OF CONTENTS

Internal Combustion Engines [40 CFR Part 63, Subpart ZZZZ]

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 2-8-3(b)]

The Permittee owns and operates a stationary copper rod production facility, and does not melt copper sulfide ore concentrates.

Source Address:	1640 South Ryan Road, New Haven, Indiana 46774
General Source Phone Number:	260-422-5541
SIC Code:	3341 (Secondary Smelting and Refining of Nonferrous Metals) 3351 (Rolling, Drawing and Extruding of Copper)
County Location:	Allen
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Federally Enforceable State Operating Permit Program Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act 1 of 28 Source Categories (Secondary Metal)

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

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

(a) One (1) copper scrap receiving and storage facility, identified as EU-1, approved for construction in 2011, with a nominal throughput of 275 tons per day, with raw materials received and stored under cover, but using no controls;

(b) One (1) natural gas-fired reverberatory batch furnace, identified as EU-2, approved for construction in 2011, with a nominal throughput of 275 tons per day, with a combined nominal heat input capacity of 97.2 MMBtu/hr for its burners (55.5 MMBtu/hr) and lances (41.6 MMBtu/hr), with the following controls:

(1) One (1) afterburner, identified as RTO-1, approved for construction in 2011, with a nominal heat input capacity of 15.0 MMBtu/hr for VOC control, exhausting through Stack S-1;

(2) One (1) acid neutralization dry sorbent lime injection system for HCl and HF control, identified as AN-1, approved for construction in 2011, and exhausting through Stack S-1;

(3) One (1) fabric filter baghouse for particulate control, identified as BH-1, approved for construction in 2011, and exhausting to Stack S-1.

(c) Two (2) natural gas-fired launder burners, identified as EU-3, approved for construction in 2011, with a combined nominal heat input capacity of 7.61 MMBtu/hr, using no controls, and exhausting inside the plant;

(d) One (1) natural gas-fired tundish burner, identified as EU-4, approved for construction in 2011, with a nominal heat input capacity of 2.52 MMBtu/hr, using no controls, and exhausting within the plant;

(e) One Copper Rod Casting Machine, identified as EU-5, approved for construction in 2011, with a nominal throughput of 30 tons of copper rod per hour, using no controls;

(f) One (1) acetylene burner, identified as EU-6, approved for construction in 201, with a nominal heat input capacity of 0.065 MMBtu/hr, using no controls, and exhausting within the plant;

(g) One (1) quench/pickling operation, identified as EU-7, approved for construction in 2011, using Isopropyl Alcohol (IPA) added to the copper rod;

(h) One (1) Wax Spray operation, identified as EU-8, approved for construction in 2011, using wax added to the copper rod, using no controls;

(i) One (1) copper slag storage and handling operation, identified as EU-9, approved for construction in 2011, with a nominal throughput of 35 tons per day, with no controls;

(j) Five (5) diesel-fueled emergency backup engines, each with a nominal heat input capacity of 36.9 HP, each with a model year later than 2007, each approved for construction in 2011, each has a displacement of less than 30 liters per cylinder, using no controls, and exhausting within the plant;

Under 40 CFR 60, Subpart IIII, this is considered an affected source.

Under 40 CFR 63, Subpart ZZZZ, this is considered to be an affected source.

(k) Natural gas-fired space heaters, with a combined nominal heat input capacity of 15.0 MMBtu/hr, exhausting inside the plant.

A.3 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) for a Federally Enforceable State Operating Permit (FESOP).

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-8-1]

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

B.2 Revocation of Permits [326 IAC 2-1.1-9(5)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.3 Affidavit of Construction [326 IAC 2-5.1-3(h)] [326 IAC 2-5.1-4][326 IAC 2-8]

This document shall also become the approval to operate pursuant to 326 IAC 2-5.1-4 and 326 IAC 2-8 when prior to the start of operation, the following requirements are met:

(a) The attached Affidavit of Construction, or its equivalent, shall be submitted to the Office of Air Quality (OAQ), verifying that the emission units were constructed as proposed in the application or the permit. The emission units covered in this permit may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM if constructed as proposed.

(b) If actual construction of the emission units differs from the construction proposed in the application, the source may not begin operation until the permit has been revised pursuant to 326 IAC 2 and an Operation Permit Validation Letter is issued.

(c) The Permittee shall attach the Operation Permit Validation Letter received from the Office of Air Quality (OAQ) to this permit.

B.4 Permit Term [326 IAC 2-8-4(2)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]

(a) This permit, F003-30250-00384, 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, until the renewal permit has been issued or denied.

B.5 Term of Conditions [326 IAC 2-1.1-9.5]

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

(a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or

(b) the emission unit to which the condition pertains permanently ceases operation.

B.6 Enforceability [326 IAC 2-8-6] [IC 13-17-12]

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.7 Severability [326 IAC 2-8-4(4)]

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.8 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]

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

B.9 Duty to Provide Information [326 IAC 2-8-4(5)(E)]

(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.10 Certification [326 IAC 2-8-3(d)][326 IAC 2-8-4(3)(C)(i)][326 IAC 2-8-5(1)]

(a) A certification required by this permit meets the requirements of 326 IAC 2-8-5(a)(1) if:

(1) it contains a certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1), 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) An "authorized individual" is defined at 326 IAC 2-1.1-1(1).

B.11 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted 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

(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 2-8-4(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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

B.12 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAQ may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

B.13 Preventive Maintenance Plan [326 IAC 1-6-3][326 IAC 2-8-4(9)][326 IAC 2-8-5(a)(1)]

(a) If required by specific condition(s) in Section D of this permit, 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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

The Permittee shall implement the PMPs.

(b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions. The PMPs and their submittal do not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

B.14 Emergency Provisions [326 IAC 2-8-12]

(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 except as provided in 326 IAC 2-8-12.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or 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
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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

The notice fulfills the requirement of 326 IAC 2-8-4(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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(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 2-8-3(c)(6) 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 2-8 and any other applicable rules.

(g) Operations may continue during an emergency only if the following conditions are met:

(1) 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.

(2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:

(A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and

(B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

B.15 Prior Permits Superseded [326 IAC 2-1.1-9.5]

(a) All terms and conditions of permits established prior to F003-30250-00384 and issued pursuant to permitting programs approved into the state implementation plan have been either:

(1) incorporated as originally stated,

(2) revised, or

(3) deleted.

(b) All previous registrations and permits are superseded by this permit.

B.16 Termination of Right to Operate [326 IAC 2-8-9][326 IAC 2-8-3(h)]

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 2-8-3(h) and 326 IAC 2-8-9.

B.17 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)][326 IAC 2-8-7(a)][326 IAC 2-8-8]

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Federally Enforceable State 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 2-8-4(5)(C)] The notification by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(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 2-8-8(a)]

(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 2-8-8(b)]

(d) The reopening and revision of this permit, under 326 IAC 2-8-8(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 2-8-8(c)]

B.18 Permit Renewal [326 IAC 2-8-3(h)]

(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 2-8-3. 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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

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

(b) A timely renewal application is one that is:

(1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

(2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 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 2-8-3(g), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.19 Permit Amendment or Revision [326 IAC 2-8-10][326 IAC 2-8-11.1]

(a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.20 Operational Flexibility [326 IAC 2-8-15][326 IAC 2-8-11.1]

(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-8-15(b) through (d) 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 approval required by 326 IAC 2-8-11.1 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 2-8-15(b) through (d). 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 2-8-15(b)(2), (c)(1), and (d).

(b) Emission Trades [326 IAC 2-8-15(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 2-8-15(c).

(c) Alternative Operating Scenarios [326 IAC 2-8-15(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 2-8-4(7). No prior notification of IDEM, OAQ, or U.S. EPA is required.

(d) 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.21 Source Modification Requirement [326 IAC 2-8-11.1]

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

B.22 Inspection and Entry [326 IAC 2-8-5(a)(2)][IC 13-14-2-2][IC 13-17-3-2][IC 13-30-3-1]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as

such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

(c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.23 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

(a) The Permittee must comply with the requirements of 326 IAC 2-8-10 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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16][326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees to IDEM, OAQ no later than 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) Failure to pay may result in administrative enforcement action or revocation of this permit.

(c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.25 Credible Evidence [326 IAC 2-8-4(3)][326 IAC 2-8-5][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 2-8-4(1)]

C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any manufacturing process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

C.2 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

(a) Pursuant to 326 IAC 2-8:

(1) The potential to emit any regulated pollutant, except particulate matter (PM), from the entire source shall be limited to less than one hundred (100) tons per twelve (12) consecutive month period.

(2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and

(3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.

(4) The potential to emit greenhouse gases (GHGs) from the entire source shall be limited to less than one hundred thousand (100,000) tons of CO_2 equivalent emissions (CO_2e) per twelve (12) consecutive month period.

(b) Pursuant to 326 IAC 2-2 (PSD), potential to emit particulate matter (PM) from the entire source shall be limited to less than one hundred (100) tons per twelve (12) consecutive month period.

(c) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided that the source's potential to emit does not exceed the above specified limits.

(d) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

C.3 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.4 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.5 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.6 Fugitive Dust Emissions [326 IAC 6-4]

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

C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

The Permittee shall comply with the applicable requirements of 326 IAC 14-10, 326 IAC 18, and 40 CFR 60.120.

Testing Requirements [326 IAC 2-8-4(3)]

C.8 Performance Testing [326 IAC 3-6]

(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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ 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.9 Compliance Requirements [326 IAC 2-1.1-11]

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

Compliance Monitoring Requirements [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)]

C.10 Compliance Monitoring [326 IAC 2-8-4(3)][326 IAC 2-8-5(a)(1)]

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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

C.11 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)][326 IAC 2-8-5(1)]

(a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale.

(b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

Corrective Actions and Response Steps [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)]

C.12 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68]

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

C.13 Response to Excursions or Exceedances [326 IAC 2-8-4] [326 IAC 2-8-5]

Upon detecting an excursion where a response step is required by the D Section or an exceedance of a limitation 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.

C.14 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4][326 IAC 2-8-5]

(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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

C.15 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring

sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner 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.16 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

(a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported 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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1). 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) The first report shall cover the period commencing on the date of issuance of this permit or the date of initial start-up, whichever is later, and ending on the last day of the reporting period. Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit, “calendar year” means the twelve (12) month period from January 1 to December 31 inclusive.

Stratospheric Ozone Protection

C.17 Compliance with 40 CFR 82 and 326 IAC 22-1

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

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(a) One (1) copper scrap receiving and storage facility, identified as EU-1, approved for construction in 2011, with a nominal throughput of 275 tons per day, with raw materials received and stored under cover, but using no controls;

(b) One (1) natural gas-fired reverberatory batch furnace, identified as EU-2, approved for construction in 2011, with a nominal throughput of 275 tons per day, with a combined nominal heat input capacity of 97.2 MMBtu/hr for its burners (55.5 MMBtu/hr) and lances (41.6 MMBtu/hr), with the following controls:

(1) One (1) afterburner, identified as RTO-1, approved for construction in 2011, with a nominal heat input capacity of 15.0 MMBtu/hr for VOC control, exhausting through Stack S-1;

(2) One (1) acid neutralization dry sorbent lime injection system for HCl and HF control, identified as AN-1, approved for construction in 2011, and exhausting through Stack S-1;

(3) One (1) fabric filter baghouse for particulate control, identified as BH-1, approved for construction in 2011, and exhausting to Stack S-1.

(c) Two (2) natural gas-fired launder burners, identified as EU-3, approved for construction in 2011, with a combined nominal heat input capacity of 7.61 MMBtu/hr, using no controls, and exhausting inside the plant;

(d) One (1) natural gas-fired tundish burner, identified as EU-4, approved for construction in 2011, with a nominal heat input capacity of 2.52 MMBtu/hr, using no controls, and exhausting within the plant;

(e) One Copper Rod Casting Machine, identified as EU-5, approved for construction in 2011, with a nominal throughput of 30 tons of copper rod per hour, using no controls;

(f) One (1) acetylene burner, identified as EU-6, approved for construction in 201, with a nominal heat input capacity of 0.065 MMBtu/hr, using no controls, and exhausting within the plant;

(g) One (1) quench/pickling operation, identified as EU-7, approved for construction in 2011, using Isopropyl Alcohol (IPA) added to the copper rod;

(h) One (1) Wax Spray operation, identified as EU-8, approved for construction in 2011, using wax added to the copper rod, using no controls.

(i) One (1) copper slag storage and handling operation, identified as EU-9, approved for construction in 2011, with a nominal throughput of 35 tons per day, with no controls;

(j) Five (5) diesel-fueled emergency backup engines, each with a nominal heat input capacity of 36.9 HP, each with a model year later than 2007, each approved for construction in 2011, each has a displacement of less than 30 liters per cylinder, using no controls, and exhausting within the plant;

Under 40 CFR 60, Subpart IIII, this is considered an affected source.

Under 40 CFR 63, Subpart ZZZZ, this is considered to be an affected source.

(k) Natural gas-fired space heaters, with a combined nominal heat input capacity of 15.0 MMBtu/hr, exhausting inside the plant.

(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 2-8-4(1)]

D.1.1 FESOP Limits [326 IAC 2-8-4] [326 IAC 2-2] [326 IAC 2-4.1]

Pursuant to 326 IAC 2-8-4, the Permittee shall comply with the following:

(a) Production throughput of the copper rod production process shall not exceed 100,375 tons of copper rod produced per twelve consecutive month period, with compliance determined at the end of each month.

(b) PM10 emissions after control from the reverberatory furnace shall be limited to 1.89 pounds per ton of copper rod produced.

(c) PM2.5 emissions after control from the reverberatory furnace shall be limited to 1.89 pounds per ton of copper rod produced.

(d) HCL emissions after control from the reverberatory furnace shall be limited to 0.19 pounds per ton of copper rod produced.

(e) HF emissions after control from the reverberatory furnace shall be limited to 0.19 pounds per ton of copper produced.

Compliance with these limits, combined with the potential to emit PM10, PM2.5, HCl, and HF from all other emission units at this source, shall limit the source-wide total potential to emit of PM10 and PM2.5 to less than 100 tons per 12 consecutive month period, and HCl and HF to less than ten (10) tons per 12 consecutive month period, each, and total HAPs to less than twenty-five (25) tons per 12 consecutive month period and shall render 326 IAC 2-7 (Part 70 Permits), 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), and 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP) not applicable.

D.1.2 Particulate Matter (PM) [326 IAC 2-2]

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

PM emissions after control from the reverberatory furnace shall be limited to 1.89 pounds per ton of copper rod produced.

Compliance with this limit, in conjunction with Condition D.1.1(a), combined with the potential to emit PM from all other emission units at this source, shall limit the source-wide total potential to emit of PM to less than 100 tons per 12 consecutive month period and shall render 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.1.3 Particulate Emission Limitations [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), particulate emissions from the reverberatory furnace shall not exceed 21.01 pounds per hour when operating at a process weight rate of 11.46 tons per hour.

The pounds per hour limitation was calculated using the following equations:

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

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

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

Pursuant to 326 IAC 8-1-6, the Permittee shall control VOC emissions using the Best Available Control Technology (BACT). The following requirements represent BACT for the reverberatory furnace:

(a) The regenerative thermal oxidizer shall operate at all times when the reverberatory furnace is in operation.

(b) The VOC emissions after control from the reverberatory furnace shall not exceed 1.0 pound of VOC per ton of copper produced over an entire process operating cycle.

Compliance with this limit, in conjunction with Condition D.1.1(a), combined with the potential to emit VOC from other emission units at the source, shall also limit the VOC emissions from the entire source to less than 100 tons per twelve (12) consecutive month period, and render 326 IAC 2-2 and 3626 IAC 2-7 not applicable.

D.1.5 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A preventive maintenance plan shall be required for the reverberatory furnace, identified as EU-02, and its control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.1.6 Particulate, VOC, HCl, and HF Control

(a) In order to comply with Conditions D.1.1, D.1.2, and D.1.3, the baghouse BH-1 shall be in operation to control particulate matter at all times that the reverberatory batch furnace is in operation.

(b) In order to comply with Conditions D.1.1 and D.1.4, the Permittee shall operate the thermal oxidizer, RTO-1, at all times that the reverberatory batch furnace is operating.

(c) In order to comply with Condition D.1.1, the Permittee shall operate the acid neutralization lime injection system at all times that the reverberatory batch furnace is operating.

D.1.7 Testing Requirements [326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11]

(a) In order to demonstrate compliance with Conditions D.1.1, D.1.2, and D.1.3, the Permittee shall perform PM, PM10, and PM2.5 testing on Stack S-1, serving the reverberatory furnace, within sixty (60) days after achieving maximum capacity, but not later than one hundred and eighty (180) days after initial startup, utilizing methods approved by the Commissioner. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C- Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

(b) In order to demonstrate compliance with Condition D.1.1 and to confirm or verify that HCl and HF are less than ten (10) tons per year each, the source shall perform HCl and HF testing on Stack S-1, not later than sixty (60) days after achieving maximum capacity, but

not later than one hundred and eighty (180) days after initial startup, utilizing methods approved by the Commissioner. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C- Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

(c) Pursuant to 326 IAC 2-1.1-11 and in order to demonstrate compliance with Condition D.1.4, and to determine the overall control efficiency (capture and destruction efficiencies) of the RTO to control VOC, the Permittee shall perform VOC testing on Stack S-1, serving the reverberatory furnace, within sixty (60) days after achieving maximum capacity, but not later than one hundred and eighty (180) days after initial startup, utilizing methods approved by the Commissioner. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C- Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

(d) Pursuant to 326 IAC 2-1.1-11, and in order to verify compliance with 326 IAC 2-8-4, the Permittee shall perform a one-time stack test on Stack S-1 to verify the NOx, SO2, and CO emission factors from the reverberatory furnace no later than sixty (60) days after achieving maximum capacity, but not later than one hundred eighty (180) days after initial startup utilizing methods as approved by the Commissioner. Section C- Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.1.8 Visible Emissions Notations

(a) Visible emission notations of the stack exhaust S-1 shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If an abnormal emission is observed, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligations with regard to the records required by this condition. Failure to take response steps accordance to Section C- Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.1.9 Parametric Monitoring - Baghouse BH-1 and Lime Injection System

The Permittee shall perform the following monitoring requirements:

(a) The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the reverberatory furnace operating, at least once per day when the reverberatory furnace is in operation when venting to the atmosphere. When for any one

reading, the pressure drop across the baghouse is outside the normal range of 1.0 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps. Section C- Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

(b) The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months, or other frequency as specified by the manufacturer. The Permittee shall maintain records of the manufacturer specifications if used as the basis for less frequent calibration or replacement.

(c) The Permittee shall monitor the lime injection rate at the acid neutralization lime injection system, at least once per day when the reverberatory furnace is in operation. When for any one reading, the lime injection is not operating correctly, the Permittee shall take reasonable response steps. Section C- Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. An observation that the system is not operating correctly is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

(d) The Permittee shall inspect the lime injection system to verify that the lime is free-flowing at least once per day when the reverberatory furnace is in operation. When for any one inspection, the lime is found not to be free-flowing, the Permittee shall take reasonable response steps. Section C- Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. An observation that the lime is not free-flowing is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

D.1.10 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) For multi-compartment units, if operations will continue for 10 days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

(b) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then failed units and the associated process will be shut down as soon as possible, but, in no case, later than the end of the current batch, until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

D.1.11 Regenerative Thermal Oxidizer (RTO-1) Temperature

(a) A continuous monitoring system shall be calibrated, maintained, and operated on the thermal oxidizer system for measuring operating temperature. For the purpose of this condition, continuous means no less than once per fifteen (15)

minutes. The output of this system shall be recorded as a three (3)-hour block average. From the date of startup until the initial stack test results are available, the Permittee shall operate the thermal oxidizer at or above the three (3)-hour block average temperature of 1,300^{o}F. On and after the date of the stack test results are available, the Permittee shall operate the thermal oxidizer at or above the three (3)–hour block average temperature as observed during the compliant stack test. When a temperature is below the temperature established during the latest stack test, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A temperature reading that is below the above mentioned temperature is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

(b) The Permittee shall determine the three (3) –hour block average temperature from the most recent valid stack test that demonstrates compliance with limits in the conditions.

D.1.12 Parametric Monitoring - RTO-1

(a) The Permittee shall determine the appropriate duct pressure or fan amperage from the most recent valid stack test that demonstrates compliance with the limits in the conditions.

(b) The duct pressure or fan amperage shall be observed at least once per day when the thermal oxidizer is in operation. On and after the date the stack test results are available, the duct pressure or fan amperage shall be maintained within the normal range as established in the most recent compliant stack test. When a pressure or amperage is outside the normal ranges listed above or ranges established during the latest stack test, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A duct pressure reading or fan amperage reading that is outside the normal range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.1.13 Record Keeping Requirements

(a) To document the compliance status with Conditions D.1.1 and D.1.2, the Permittee shall maintain records of the production throughput in the copper rod production process. Records shall be complete and sufficient to establish compliance with the emission limits established in Conditions D.1.1 and D.1.2.

(b) To document the compliance status with Condition D.1.8, the Permittee shall maintain a daily record of the visible emissions from the stack S-1 exhaust controlling the reverberatory furnace. The Permittee shall include in its daily record when a visible emissions is not observed (e.g. the process did not operate that day).

(c) To document the compliance status with Conditions D.1.9, the Permittee shall maintain a daily record of the pressure drop across baghouse BH-1. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).

(d) To document the compliance status with Condition D.1.9, the Permittee shall maintain a daily record of the flow rate of lime injected into the acid neutralization lime injection system. The Permittee shall include in its daily record when a flow rate reading is not taken and the reason for the lack of flow rate (e.g. the process did not operate that day).

(e) To document the compliance status with Condition D.1.11, the Permittee shall maintain a record of operating temperatures for the afterburner RTO-1. The Permittee shall include in its daily record when a temperature is not taken (e.g. the process did not operate that day).

(f) To document the compliance status with Condition D.1.12, the Permittee shall maintain a record of fan amperage or duct pressure for the afterburner RTO-1. The Permittee shall include in its daily record when a reading is not taken (e.g. the process did not operate that day).

(g) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

D.1.14 Reporting Requirements

(a) A quarterly report, or its equivalent, of the production throughput in the copper rod production process as required in Conditions D.1.1, D.1.2, and D.1.4 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, within thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required in this condition. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION E.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(j) Five (5) diesel-fueled emergency backup engines , each with a nominal heat input capacity of 36.9 HP, each with a model year later than 2007, each approved for construction in 2011, each has a displacement of less than 30 liters per cylinder, using no controls, and exhausting within the plant.

Under 40 CFR 60, Subpart IIII, this is considered an affected source.

Under 40 CFR 63, Subpart ZZZZ, this is considered to be an affected source.

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

New Source Performance Standards (NSPS) Requirements [326 IAC 12-1]

E.1.1 General Provisions Relating to New Source Performance Standards (NSPS) under 40 CFR Part 60 [326 IAC 12-1] [40 CFR 60, Subaprt IIII]

(a) Pursuant to 40 CFR 60, Subpart IIII, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart IIII - General Provisions, which are incorporated by reference as 326 IAC 12-1 for the five (5) diesel-fueled emergency backup engines.

(b) Pursuant to 40 CFR 60, Subpart IIII, the Permittee shall submit all required notifications and reports to:

Indiana Department of Environmental Management
Compliance Branch
Ofice of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

E.1.2 New Source Performance Standards (NSPS), Subpart IIII - Standards of Performance for Stationary Ignition Internal Combustion Engines [40 CFR 60, Subpart IIII]

Pursuant to 40 CFR 60, Subpart IIII, the Permittee shall comply with the provisions of 40 CFR 60, Subpart IIII, for the five (5) diesel-fueled emergency backup engines, as specified as follows. Applicable portions are listed below. The Subpart is listed in its entirety in Attachment A of this permit.

(a) 40 CFR 60.4200(a)(2)
(b) 40 CFR 60.4205(b)
(c) 40 CFR 60.4206
(d) 40 CFR 60.4207(b)
(e) 40 CFR 60.4208
(f) 40 CFR 60.4209(a)
(g) 40 CFR 60.4211(a),(c),(e)
(h) 40 CFR 60.4214(b)

This Subpart IIII contains no testing requirements applicable to this source.

SECTION E.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(j) Five (5) diesel-fueled emergency backup engines , each with a nominal heat input capacity of 36.9 HP, each with a model year later than 2007, each approved for construction in 2011, each has a displacement of less than 30 liters per cylinder, using no controls, and exhausting within the plant.

Under 40 CFR 60, Subpart IIII, this is considered an affected source.

Under 40 CFR 63, Subpart ZZZZ, this is considered to be an affected source.

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

National Emissions Standards for Hazardous Air Pollutants (NESHAP) Requirements: Stationary Reciprocating Internal Combustion Engines

E.2.1 General Provisions Relating to National Emissions 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, Subpart ZZZZ, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference as 326 IAC 20-82, for the five (5) diesel-fueled emergency backup engines, as specified in Table 8 of 40 CFR Part 63, Subpart ZZZZ in accordance with the schedule in 40 CFR 63, Subpart ZZZZ.

(b) Pursuant to 40 CFR 63, Subpart ZZZZ, the Permittee shall submit all required notifications and reports to:

Indiana Department of Environmental Management
Compliance Branch
Ofice of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

E.2.2 National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines [40 CFR Part 63, Subpart ZZZZ]

The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart ZZZZ, included as Attachment B, which are incorporated by reference as 326 20-82 for the five (5) diesel-fueled emergency backup engines :

(a) 40 CFR 63.6580
(b) 40 CFR 63.6585
(c) 40 CFR 63.6590
(d) 40 CFR 63.6595
(e) 40 CFR 63.6665
(f) 40 CFR 63.6670
(g) 40 CFR 63.6675

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) CERTIFICATION

Source Name: SDI LaFarga, LLC
Source Address: 1640 South Ryan Road, New Haven, Indiana 46774
FESOP Permit No.: F003-30250-00384

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:

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

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
EMERGENCY OCCURRENCE REPORT

Source Name: SDI LaFarga, LLC
Source Address: 1640 South Ryan Road, New Haven, Indiana 46774
FESOP Permit No.: F003-30250-00384

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**) daytime 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 Describe:
Type of Pollutants Emitted: TSP, PM-10, SO_2, VOC, NO_X, CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by:_____

Title / Position:_____

Date:_____

Phone: _____

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

FESOP Quarterly Report

Source Name: SDI LaFarga, LLC
Source Address: 1640 South Ryan Road, New Haven, Indiana 46774
FESOP Permit No.: F003-30250-00384
Facility: Reverberatory Furnace EU-2
Parameter: Annual Production Throughput Limit
Limit: 100,375 tons of copper rod produced per twelve consecutive month period

YEAR:_____

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

☐ 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
FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: SDI LaFarga, LLC
Source Address: 1640 SouthRyan Road, New Haven, Indiana 46774
FESOP Permit No.: F003-30250-00384

Months: _____ to _____ Year: _____

This report shall be submitted quarterly based on a calendar year. 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 ANo deviations occurred this reporting period@.

□ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

□ THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

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

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

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

Form Completed by:_____

Title / Position:_____

Date:_____

Phone: _____

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

SDI LaFarga, LLC
1640 South Ryan Road
New Haven, Indiana 46774

Affidavit of Construction

I, _____, being duly sworn upon my oath, depose and say:
(Name of the Authorized Representative)

1. I live in _____ County, Indiana and being of sound mind and over twenty-one (21) years of age, I am competent to give this affidavit.

2. I hold the position of _____ for _____.
(Title) (Company Name)

3. By virtue of my position with _____, I have personal
(Company Name)
knowledge of the representations contained in this affidavit and am authorized to make these representations on behalf of _____.
(Company Name)

4. I hereby certify that SDI LaFarga, LLC 1640 South Ryan Road, New Haven, Indiana 46774, completed construction of the copper rod production facility on _____in conformity with the requirements and intent of the construction permit application received by the Office of Air Quality on February 21, 2009 and as permitted pursuant to New Source Construction Permit and Federally Enforceable State Operating Permit No. F003-30250-00384, Plant ID No. 003-00384 issued on _____.

5. **Permittee, please cross out the following statement if it does not apply:** Additional (operations/facilities) were constructed/substituted as described in the attachment to this document and were not made in accordance with the construction permit.

Further Affiant said not.

I affirm under penalties of perjury that the representations contained in this affidavit are true, to the best of my information and belief.

Signature_____
Date_____

STATE OF INDIANA)
)SS

COUNTY OF _____)

Subscribed and sworn to me, a notary public in and for _____ County and State of Indiana

on this _____ day of _____, 20 _____. My Commission expires: _____.

Signature_____
Name_____ (typed or printed)

Subpart IIII—Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

Source: 71 FR 39172, July 11, 2006, unless otherwise noted.

What This Subpart Covers

§ 60.4200 Am I subject to this subpart?

(a) The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary compression ignition (CI) internal combustion engines (ICE) as specified in paragraphs (a)(1) through (3) of this section. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.

(1) Manufacturers of stationary CI ICE with a displacement of less than 30 liters per cylinder where the model year is:

(i) 2007 or later, for engines that are not fire pump engines,

(ii) The model year listed in table 3 to this subpart or later model year, for fire pump engines.

(2) Owners and operators of stationary CI ICE that commence construction after July 11, 2005 where the stationary CI ICE are:

(i) Manufactured after April 1, 2006 and are not fire pump engines, or

(ii) Manufactured as a certified National Fire Protection Association (NFPA) fire pump engine after July 1, 2006.

(3) Owners and operators of stationary CI ICE that modify or reconstruct their stationary CI ICE after July 11, 2005.

(b) The provisions of this subpart are not applicable to stationary CI ICE being tested at a stationary CI ICE test cell/stand.

(c) If you are an owner or operator of an area source subject to this subpart, you are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 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 applicable to area sources.

(d) Stationary CI ICE may be eligible for exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C (or the exemptions described in 40 CFR part 89, subpart J and 40 CFR part 94, subpart J, for engines that would need to be certified to standards in those parts), except that owners and operators, as well as manufacturers, may be eligible to request an exemption for national security.

Emission Standards for Manufacturers

§ 60.4201 What emission standards must I meet for non-emergency engines if I am a stationary CI internal combustion engine manufacturer?

(a) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later non-emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 kilowatt (KW) (3,000 horsepower (HP)) and a displacement of less than 10 liters per cylinder to the certification emission standards for new nonroad CI engines in 40 CFR 89.112, 40 CFR 89.113, 40 CFR 1039.101, 40 CFR 1039.102, 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, and 40 CFR 1039.115, as applicable, for all pollutants, for the same model year and maximum engine power.

(b) Stationary CI internal combustion engine manufacturers must certify their 2007 through 2010 model year non-emergency stationary CI ICE with a maximum engine power greater than 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder to the emission standards in table 1 to this subpart, for all pollutants, for the same maximum engine power.

(c) Stationary CI internal combustion engine manufacturers must certify their 2011 model year and later non-emergency stationary CI ICE with a maximum engine power greater than 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder to the certification emission standards for new nonroad CI engines in 40 CFR 1039.101, 40 CFR 1039.102, 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, and 40 CFR 1039.115, as applicable, for all pollutants, for the same maximum engine power.

(d) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later non-emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder to the certification emission standards for new marine CI engines in 40 CFR 94.8, as applicable, for all pollutants, for the same displacement and maximum engine power.

§ 60.4202 What emission standards must I meet for emergency engines if I am a stationary CI internal combustion engine manufacturer?

(a) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder that are not fire pump engines to the emission standards specified in paragraphs (a)(1) through (2) of this section.

(1) For engines with a maximum engine power less than 37 KW (50 HP):

(i) The certification emission standards for new nonroad CI engines for the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants for model year 2007 engines, and

(ii) The certification emission standards for new nonroad CI engines in 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, 40 CFR 1039.115, and table 2 to this subpart, for 2008 model year and later engines.

(2) For engines with a maximum engine power greater than or equal to 37 KW (50 HP), the certification emission standards for new nonroad CI engines for the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants beginning in model year 2007.

(b) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power greater than 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder that are not fire pump engines to the emission standards specified in paragraphs (b)(1) through (2) of this section.

(1) For 2007 through 2010 model years, the emission standards in table 1 to this subpart, for all pollutants, for the same maximum engine power.

(2) For 2011 model year and later, the certification emission standards for new nonroad CI engines for engines of the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants.

(c) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder that are not fire pump engines to the certification emission standards for new marine CI engines in 40 CFR 94.8, as applicable, for all pollutants, for the same displacement and maximum engine power.

(d) Beginning with the model years in table 3 to this subpart, stationary CI internal combustion engine manufacturers must certify their fire pump stationary CI ICE to the emission standards in table 4 to this subpart, for all pollutants, for the same model year and NFPA nameplate power.

§ 60.4203 How long must my engines meet the emission standards if I am a stationary CI internal combustion engine manufacturer?

Engines manufactured by stationary CI internal combustion engine manufacturers must meet the emission standards as required in §§60.4201 and 60.4202 during the useful life of the engines.

Emission Standards for Owners and Operators

§ 60.4204 What emission standards must I meet for non-emergency engines if I am an owner or operator of a stationary CI internal combustion engine?

(a) Owners and operators of pre-2007 model year non-emergency stationary CI ICE with a displacement of less than 10 liters per cylinder must comply with the emission standards in table 1 to this subpart. Owners and operators of pre-2007 model year non-emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder must comply with the emission standards in 40 CFR 94.8(a)(1).

(b) Owners and operators of 2007 model year and later non-emergency stationary CI ICE with a displacement of less than 30 liters per cylinder must comply with the emission standards for new CI engines in §60.4201 for their 2007 model year and later stationary CI ICE, as applicable.

(c) Owners and operators of non-emergency stationary CI ICE with a displacement of greater than or equal to 30 liters per cylinder must meet the requirements in paragraphs (c)(1) and (2) of this section.

(1) Reduce nitrogen oxides (NO_X) emissions by 90 percent or more, or limit the emissions of NO_X in the stationary CI internal combustion engine exhaust to 1.6 grams per KW-hour (g/KW-hr) (1.2 grams per HP-hour (g/HP-hr)).

(2) Reduce particulate matter (PM) emissions by 60 percent or more, or limit the emissions of PM in the stationary CI internal combustion engine exhaust to 0.15 g/KW-hr (0.11 g/HP-hr).

§ 60.4205 What emission standards must I meet for emergency engines if I am an owner or operator of a stationary CI internal combustion engine?

(a) Owners and operators of pre-2007 model year emergency stationary CI ICE with a displacement of less than 10 liters per cylinder that are not fire pump engines must comply with the emission standards in table 1 to this subpart. Owners and operators of pre-2007 model year non-emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards in 40 CFR 94.8(a)(1).

(b) Owners and operators of 2007 model year and later emergency stationary CI ICE with a displacement of less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards for new nonroad CI engines in §60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE.

(c) Owners and operators of fire pump engines with a displacement of less than 30 liters per cylinder must comply with the emission standards in table 4 to this subpart, for all pollutants.

(d) Owners and operators of emergency stationary CI ICE with a displacement of greater than or equal to 30 liters per cylinder must meet the requirements in paragraphs (d)(1) and (2) of this section.

(1) Reduce NO_x emissions by 90 percent or more, or limit the emissions of NO_x in the stationary CI internal combustion engine exhaust to 1.6 grams per KW-hour (1.2 grams per HP-hour).

(2) Reduce PM emissions by 60 percent or more, or limit the emissions of PM in the stationary CI internal combustion engine exhaust to 0.15 g/KW-hr (0.11 g/HP-hr).

§ 60.4206 How long must I meet the emission standards if I am an owner or operator of a stationary CI internal combustion engine?

Owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in §§60.4204 and 60.4205 according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer, over the entire life of the engine.

Fuel Requirements for Owners and Operators

§ 60.4207 What fuel requirements must I meet if I am an owner or operator of a stationary CI internal combustion engine subject to this subpart?

(a) Beginning October 1, 2007, owners and operators of stationary CI ICE subject to this subpart that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(a).

(b) Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel.

(c) Owners and operators of pre-2011 model year stationary CI ICE subject to this subpart may petition the Administrator for approval to use remaining non-compliant fuel that does not meet the fuel requirements of paragraphs (a) and (b) of this section beyond the dates required for the purpose of using up existing fuel inventories. If approved, the petition will be valid for a period of up to 6 months. If additional time is needed, the owner or operator is required to submit a new petition to the Administrator.

(d) Owners and operators of pre-2011 model year stationary CI ICE subject to this subpart that are located in areas of Alaska not accessible by the Federal Aid Highway System may petition the Administrator for approval to use any fuels mixed with used lubricating oil that do not meet the fuel requirements of paragraphs (a) and (b) of this section. Owners and operators must demonstrate in their petition to the Administrator that there is no other place to use the lubricating oil. If approved, the petition will be valid for a period of up to 6 months. If additional time is needed, the owner or operator is required to submit a new petition to the Administrator.

(e) Stationary CI ICE that have a national security exemption under §60.4200(d) are also exempt from the fuel requirements in this section.

Other Requirements for Owners and Operators

§ 60.4208 What is the deadline for importing or installing stationary CI ICE produced in the previous model year?

(a) After December 31, 2008, owners and operators may not install stationary CI ICE (excluding fire pump engines) that do not meet the applicable requirements for 2007 model year engines.

(b) After December 31, 2009, owners and operators may not install stationary CI ICE with a maximum engine power of less than 19 KW (25 HP) (excluding fire pump engines) that do not meet the applicable requirements for 2008 model year engines.

(c) After December 31, 2014, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 19 KW (25 HP) and less than 56 KW (75 HP) that do not meet the applicable requirements for 2013 model year non-emergency engines.

(d) After December 31, 2013, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 56 KW (75 HP) and less than 130 KW (175 HP) that do not meet the applicable requirements for 2012 model year non-emergency engines.

(e) After December 31, 2012, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 130 KW (175 HP), including those above 560 KW (750 HP), that do not meet the applicable requirements for 2011 model year non-emergency engines.

(f) After December 31, 2016, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 560 KW (750 HP) that do not meet the applicable requirements for 2015 model year non-emergency engines.

(g) In addition to the requirements specified in §§60.4201, 60.4202, 60.4204, and 60.4205, it is prohibited to import stationary CI ICE with a displacement of less than 30 liters per cylinder that do not meet the applicable requirements specified in paragraphs (a) through (f) of this section after the dates specified in paragraphs (a) through (f) of this section.

(h) The requirements of this section do not apply to owners or operators of stationary CI ICE that have been modified, reconstructed, and do not apply to engines that were removed from one existing location and reinstalled at a new location.

§ 60.4209 What are the monitoring requirements if I am an owner or operator of a stationary CI internal combustion engine?

If you are an owner or operator, you must meet the monitoring requirements of this section. In addition, you must also meet the monitoring requirements specified in §60.4211.

(a) If you are an owner or operator of an emergency stationary CI internal combustion engine, you must install a non-resettable hour meter prior to startup of the engine.

(b) If you are an owner or operator of a stationary CI internal combustion engine equipped with a diesel particulate filter to comply with the emission standards in §60.4204, the diesel particulate filter must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached.

Compliance Requirements

§ 60.4210 What are my compliance requirements if I am a stationary CI internal combustion engine manufacturer?

(a) Stationary CI internal combustion engine manufacturers must certify their stationary CI ICE with a displacement of less than 10 liters per cylinder to the emission standards specified in §60.4201(a) through (c) and §60.4202(a), (b) and (d) using the certification procedures required in 40 CFR part 89, subpart B, or 40 CFR part 1039, subpart C, as applicable, and must test their engines as specified in those parts. For the purposes of this subpart, engines certified to the standards in table 1 to this subpart shall be subject to the same requirements as engines certified to the standards in 40 CFR part 89. For the purposes of this subpart, engines certified to the standards in table 4 to this subpart shall be subject to the same requirements as engines certified to the standards in 40 CFR part 89, except that engines with NFPA nameplate power of less than 37 KW (50 HP) certified to model year 2011 or later standards shall be subject to the same requirements as engines certified to the standards in 40 CFR part 1039.

(b) Stationary CI internal combustion engine manufacturers must certify their stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder to the emission standards specified in §60.4201(d) and §60.4202(c) using the certification procedures required in 40 CFR part 94 subpart C, and must test their engines as specified in 40 CFR part 94.

(c) Stationary CI internal combustion engine manufacturers must meet the requirements of 40 CFR 1039.120, 40 CFR 1039.125, 40 CFR 1039.130, 40 CFR 1039.135, and 40 CFR part 1068 for engines that are certified to the emission standards in 40 CFR part 1039. Stationary CI internal combustion engine manufacturers must meet the corresponding provisions of 40 CFR part 89 or 40 CFR part 94 for engines that would be covered by that part if they were nonroad (including marine) engines. Labels on such engines must refer to stationary engines, rather than or in addition to nonroad or marine engines, as appropriate. Stationary CI internal combustion engine manufacturers must label their engines according to paragraphs (c)(1) through (3) of this section.

(1) Stationary CI internal combustion engines manufactured from January 1, 2006 to March 31, 2006 (January 1, 2006 to June 30, 2006 for fire pump engines), other than those that are part of certified engine families under the nonroad CI engine regulations, must be labeled according to 40 CFR 1039.20.

(2) Stationary CI internal combustion engines manufactured from April 1, 2006 to December 31, 2006 (or, for fire pump engines, July 1, 2006 to December 31 of the year preceding the year listed in table 3 to this subpart) must be labeled according to paragraphs (c)(2)(i) through (iii) of this section:

(i) Stationary CI internal combustion engines that are part of certified engine families under the nonroad regulations must meet the labeling requirements for nonroad CI engines, but do not have to meet the labeling requirements in 40 CFR 1039.20.

(ii) Stationary CI internal combustion engines that meet Tier 1 requirements (or requirements for fire pumps) under this subpart, but do not meet the requirements applicable to nonroad CI engines must be labeled according to 40 CFR 1039.20. The engine manufacturer may add language to the label clarifying that the engine meets Tier 1 requirements (or requirements for fire pumps) of this subpart.

(iii) Stationary CI internal combustion engines manufactured after April 1, 2006 that do not meet Tier 1 requirements of this subpart, or fire pumps engines manufactured after July 1, 2006 that do not meet the requirements for fire pumps under this subpart, may not be used in the U.S. If any such engines are manufactured in the U.S. after April 1, 2006 (July 1, 2006 for fire pump engines), they must be exported or must be brought into compliance with the appropriate

standards prior to initial operation. The export provisions of 40 CFR 1068.230 would apply to engines for export and the manufacturers must label such engines according to 40 CFR 1068.230.

(3) Stationary CI internal combustion engines manufactured after January 1, 2007 (for fire pump engines, after January 1 of the year listed in table 3 to this subpart, as applicable) must be labeled according to paragraphs (c)(3)(i) through (iii) of this section.

(i) Stationary CI internal combustion engines that meet the requirements of this subpart and the corresponding requirements for nonroad (including marine) engines of the same model year and HP must be labeled according to the provisions in part 89, 94 or 1039, as appropriate.

(ii) Stationary CI internal combustion engines that meet the requirements of this subpart, but are not certified to the standards applicable to nonroad (including marine) engines of the same model year and HP must be labeled according to the provisions in part 89, 94 or 1039, as appropriate, but the words “stationary” must be included instead of “nonroad” or “marine” on the label. In addition, such engines must be labeled according to 40 CFR 1039.20.

(iii) Stationary CI internal combustion engines that do not meet the requirements of this subpart must be labeled according to 40 CFR 1068.230 and must be exported under the provisions of 40 CFR 1068.230.

(d) An engine manufacturer certifying an engine family or families to standards under this subpart that are identical to standards applicable under parts 89, 94, or 1039 for that model year may certify any such family that contains both nonroad (including marine) and stationary engines as a single engine family and/or may include any such family containing stationary engines in the averaging, banking and trading provisions applicable for such engines under those parts.

(e) Manufacturers of engine families discussed in paragraph (d) of this section may meet the labeling requirements referred to in paragraph (c) of this section for stationary CI ICE by either adding a separate label containing the information required in paragraph (c) of this section or by adding the words “and stationary” after the word “nonroad” or “marine,” as appropriate, to the label.

(f) Starting with the model years shown in table 5 to this subpart, stationary CI internal combustion engine manufacturers must add a permanent label stating that the engine is for stationary emergency use only to each new emergency stationary CI internal combustion engine greater than or equal to 19 KW (25 HP) that meets all the emission standards for emergency engines in §60.4202 but does not meet all the emission standards for non-emergency engines in §60.4201. The label must be added according to the labeling requirements specified in 40 CFR 1039.135(b). Engine manufacturers must specify in the owner's manual that operation of emergency engines is limited to emergency operations and required maintenance and testing.

(g) Manufacturers of fire pump engines may use the test cycle in table 6 to this subpart for testing fire pump engines and may test at the NFPA certified nameplate HP, provided that the engine is labeled as “Fire Pump Applications Only”.

(h) Engine manufacturers, including importers, may introduce into commerce uncertified engines or engines certified to earlier standards that were manufactured before the new or changed standards took effect until inventories are depleted, as long as such engines are part of normal inventory. For example, if the engine manufacturers' normal industry practice is to keep on hand a one-month supply of engines based on its projected sales, and a new tier of standards starts to apply for the 2009 model year, the engine manufacturer may manufacture engines based on the normal inventory requirements late in the 2008 model year, and sell those engines for installation. The engine manufacturer may not circumvent the provisions of §§60.4201 or 60.4202 by stockpiling engines that are built before new or changed standards take effect. Stockpiling of such engines beyond normal industry practice is a violation of this subpart.

(i) The replacement engine provisions of 40 CFR 89.1003(b)(7), 40 CFR 94.1103(b)(3), 40 CFR 94.1103(b)(4) and 40 CFR 1068.240 are applicable to stationary CI engines replacing existing equipment that is less than 15 years old.

§ 60.4211 What are my compliance requirements if I am an owner or operator of a stationary CI internal combustion engine?

(a) If you are an owner or operator and must comply with the emission standards specified in this subpart, you must operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. In addition, owners and operators may only change those settings that are permitted by the manufacturer. You must also meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you.

(b) If you are an owner or operator of a pre-2007 model year stationary CI internal combustion engine and must comply with the emission standards specified in §§60.4204(a) or 60.4205(a), or if you are an owner or operator of a CI fire pump engine that is manufactured prior to the model years in table 3 to this subpart and must comply with the emission standards specified in §60.4205(c), you must demonstrate compliance according to one of the methods specified in paragraphs (b)(1) through (5) of this section.

(1) Purchasing an engine certified according to 40 CFR part 89 or 40 CFR part 94, as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications.

(2) Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in this subpart and these methods must have been followed correctly.

(3) Keeping records of engine manufacturer data indicating compliance with the standards.

(4) Keeping records of control device vendor data indicating compliance with the standards.

(5) Conducting an initial performance test to demonstrate compliance with the emission standards according to the requirements specified in §60.4212, as applicable.

(c) If you are an owner or operator of a 2007 model year and later stationary CI internal combustion engine and must comply with the emission standards specified in §60.4204(b) or §60.4205(b), or if you are an owner or operator of a CI fire pump engine that is manufactured during or after the model year that applies to your fire pump engine power rating in table 3 to this subpart and must comply with the emission standards specified in §60.4205(c), you must comply by purchasing an engine certified to the emission standards in §60.4204(b), or §60.4205(b) or (c), as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine must be installed and configured according to the manufacturer's specifications.

(d) If you are an owner or operator and must comply with the emission standards specified in §60.4204(c) or §60.4205(d), you must demonstrate compliance according to the requirements specified in paragraphs (d)(1) through (3) of this section.

(1) Conducting an initial performance test to demonstrate initial compliance with the emission standards as specified in §60.4213.

(2) Establishing operating parameters to be monitored continuously to ensure the stationary internal combustion engine continues to meet the emission standards. The owner or operator must petition the Administrator for approval of operating parameters to be monitored continuously. The petition must include the information described in paragraphs (d)(2)(i) through (v) of this section.

(i) Identification of the specific parameters you propose to monitor continuously;

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

(iii) 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;

(iv) A discussion identifying the methods and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and

(v) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.

(3) For non-emergency engines with a displacement of greater than or equal to 30 liters per cylinder, conducting annual performance tests to demonstrate continuous compliance with the emission standards as specified in §60.4213.

(e) Emergency stationary ICE may be operated 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. There is no time limit on the use of emergency stationary ICE in emergency situations. Anyone 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 ICE beyond 100 hours per year. For owners and operators of emergency engines meeting standards under §60.4205 but not §60.4204, any operation other than emergency operation, and maintenance and testing as permitted in this section, is prohibited.

Testing Requirements for Owners and Operators

§ 60.4212 What test methods and other procedures must I use if I am an owner or operator of a stationary CI internal combustion engine with a displacement of less than 30 liters per cylinder?

Owners and operators of stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests pursuant to this subpart must do so according to paragraphs (a) through (d) of this section.

(a) The performance test must be conducted according to the in-use testing procedures in 40 CFR part 1039, subpart F.

(b) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR part 1039 must not exceed the not-to-exceed (NTE) standards for the same model year and maximum engine power as required in 40 CFR 1039.101(e) and 40 CFR 1039.102(g)(1), except as specified in 40 CFR 1039.104(d). This requirement starts when NTE requirements take effect for nonroad diesel engines under 40 CFR part 1039.

(c) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8, as applicable, must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in 40 CFR 89.112 or 40 CFR 94.8, as applicable, determined from the following equation:

$$\text{NTE requirement for each pollutant} = (1.25) \times (\text{STD}) \qquad \text{(Eq. 1)}$$

Where:

STD = The standard specified for that pollutant in 40 CFR 89.112 or 40 CFR 94.8, as applicable.

Alternatively, stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8 may follow the testing procedures specified in §60.4213 of this subpart, as appropriate.

(d) Exhaust emissions from stationary CI ICE that are complying with the emission standards for pre-2007 model year engines in §60.4204(a), §60.4205(a), or §60.4205(c) must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in §60.4204(a), §60.4205(a), or §60.4205(c), determined from the equation in paragraph (c) of this section.

Where:

STD = The standard specified for that pollutant in §60.4204(a), §60.4205(a), or §60.4205(c).

Alternatively, stationary CI ICE that are complying with the emission standards for pre-2007 model year engines in §60.4204(a), §60.4205(a), or §60.4205(c) may follow the testing procedures specified in §60.4213, as appropriate.

§ 60.4213 What test methods and other procedures must I use if I am an owner or operator of a stationary CI internal combustion engine with a displacement of greater than or equal to 30 liters per cylinder?

Owners and operators of stationary CI ICE with a displacement of greater than or equal to 30 liters per cylinder must conduct performance tests according to paragraphs (a) through (d) of this section.

(a) Each performance test must be conducted according to the requirements in §60.8 and under the specific conditions that this subpart specifies in table 7. The test must be conducted within 10 percent of 100 percent peak (or the highest achievable) load.

(b) You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in §60.8(c).

(c) You must conduct three separate test runs for each performance test required in this section, as specified in §60.8(f). Each test run must last at least 1 hour.

(d) To determine compliance with the percent reduction requirement, you must follow the requirements as specified in paragraphs (d)(1) through (3) of this section.

(1) You must use Equation 2 of this section to determine compliance with the percent reduction requirement:

$$\frac{C_i - C_o}{C_i} \times 100 = R \qquad \text{(Eq. 2)}$$

Where:

C_i= concentration of NO_Xor PM at the control device inlet,

C_o= concentration of NO_Xor PM at the control device outlet, and

R = percent reduction of NO_Xor PM emissions.

(2) You must normalize the NO_Xor PM concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen (O_2) using Equation 3 of this section, or an equivalent percent carbon dioxide (CO_2) using the procedures described in paragraph (d)(3) of this section.

$$C_{adj} = C_d \frac{5.9}{20.9 - \%\ O_2} \qquad \text{(Eq. 3)}$$

Where:

C_{adj}= Calculated NO_Xor PM concentration adjusted to 15 percent O_2.

C_d= Measured concentration of NO_Xor PM, uncorrected.

5.9 = 20.9 percent O_2−15 percent O_2, the defined O_2correction value, percent.

%O_2= Measured O_2concentration, dry basis, percent.

(3) If pollutant concentrations are to be corrected to 15 percent $O_2$and CO_2concentration is measured in lieu of O_2concentration measurement, a CO_2correction factor is needed. Calculate the CO_2correction factor as described in paragraphs (d)(3)(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:

$$F_o = \frac{0.209_{F_d}}{F_c} \qquad \text{(Eq. 4)}$$

Where:

F_o= Fuel factor based on the ratio of O_2volume to the ultimate CO_2volume produced by the fuel at zero percent excess air.

0.209 = Fraction of air that is O_2, percent/100.

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

F_c= Ratio of the volume of CO_2produced to the gross calorific value of the fuel from Method 19, dsm^3 /J (dscf/10^6 Btu).

(ii) Calculate the CO_2correction factor for correcting measurement data to 15 percent O_2, as follows:

$$X_{CO_2} = \frac{5.9}{F_o} \qquad \text{(Eq. 5)}$$

Where:

X_{CO2}= CO_2correction factor, percent.

5.9 = 20.9 percent O_2−15 percent O_2, the defined O_2correction value, percent.

(iii) Calculate the $NO_X$and PM gas concentrations adjusted to 15 percent O_2using CO_2as follows:

$$C_{adj} = C_d \frac{X_{CO_2}}{\%CO_2} \qquad \text{(Eq. 6)}$$

Where:

C_{adj}= Calculated NO_Xor PM concentration adjusted to 15 percent O_2.

C_d= Measured concentration of NO_Xor PM, uncorrected.

%CO_2= Measured CO_2concentration, dry basis, percent.

(e) To determine compliance with the NO_Xmass per unit output emission limitation, convert the concentration of NO_Xin the engine exhaust using Equation 7 of this section:

$$ER = \frac{C_d \times 1.912 \times 10^{-3} \times Q \times T}{KW\text{-hour}} \quad (Eq.\ 7)$$

Where:

ER = Emission rate in grams per KW-hour.

C_d= Measured NO_Xconcentration in ppm.

1.912x10^{-3}= Conversion constant for ppm $NO_X$to grams per standard cubic meter at 25 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meter per hour.

T = Time of test run, in hours.

KW-hour = Brake work of the engine, in KW-hour.

(f) To determine compliance with the PM mass per unit output emission limitation, convert the concentration of PM in the engine exhaust using Equation 8 of this section:

$$ER = \frac{C_{adj} \times Q \times T}{KW\text{-hour}} \quad (Eq.\ 8)$$

Where:

ER = Emission rate in grams per KW-hour.

C_{adj}= Calculated PM concentration in grams per standard cubic meter.

Q = Stack gas volumetric flow rate, in standard cubic meter per hour.

T = Time of test run, in hours.

KW-hour = Energy output of the engine, in KW.

Notification, Reports, and Records for Owners and Operators

§ 60.4214 What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary CI internal combustion engine?

(a) Owners and operators of non-emergency stationary CI ICE that are greater than 2,237 KW (3,000 HP), or have a displacement of greater than or equal to 10 liters per cylinder, or are pre-2007 model year engines that are greater than 130 KW (175 HP) and not certified, must meet the requirements of paragraphs (a)(1) and (2) of this section.

(1) Submit an initial notification as required in §60.7(a)(1). The notification must include the information in paragraphs (a)(1)(i) through (v) of this section.

(i) Name and address of the owner or operator;

(ii) The address of the affected source;

(iii) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;

(iv) Emission control equipment; and

(v) Fuel used.

(2) Keep records of the information in paragraphs (a)(2)(i) through (iv) of this section.

(i) All notifications submitted to comply with this subpart and all documentation supporting any notification.

(ii) Maintenance conducted on the engine.

(iii) If the stationary CI internal combustion is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards.

(iv) If the stationary CI internal combustion is not a certified engine, documentation that the engine meets the emission standards.

(b) If the stationary CI internal combustion engine is an emergency stationary internal combustion engine, the owner or operator is not required to submit an initial notification. Starting with the model years in table 5 to this subpart, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time.

(c) If the stationary CI internal combustion engine is equipped with a diesel particulate filter, the owner or operator must keep records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached.

Special Requirements

§ 60.4215 What requirements must I meet for engines used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands?

(a) Stationary CI ICE that are used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands are required to meet the applicable emission standards in §60.4205. Non-emergency stationary CI ICE with a displacement of greater than or equal to 30 liters per cylinder, must meet the applicable emission standards in §60.4204(c).

(b) Stationary CI ICE that are used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands are not required to meet the fuel requirements in §60.4207.

§ 60.4216 What requirements must I meet for engines used in Alaska?

(a) Prior to December 1, 2010, owners and operators of stationary CI engines located in areas of Alaska not accessible by the Federal Aid Highway System should refer to 40 CFR part 69 to determine the diesel fuel requirements applicable to such engines.

(b) The Governor of Alaska may submit for EPA approval, by no later than January 11, 2008, an alternative plan for implementing the requirements of 40 CFR part 60, subpart IIII, for public-sector electrical utilities located in rural areas of Alaska not accessible by the Federal Aid Highway System. This alternative plan must be based on the requirements of section 111 of the Clean Air Act including any increased risks to human health and the environment and must also be based on the unique circumstances related to remote power generation, climatic conditions, and serious economic impacts resulting from implementation of 40 CFR part 60, subpart IIII. If EPA approves by rulemaking process an alternative plan, the provisions as approved by EPA under that plan shall apply to the diesel engines used in new stationary internal combustion engines subject to this paragraph.

§ 60.4217 What emission standards must I meet if I am an owner or operator of a stationary internal combustion engine using special fuels?

(a) Owners and operators of stationary CI ICE that do not use diesel fuel, or who have been given authority by the Administrator under §60.4207(d) of this subpart to use fuels that do not meet the fuel requirements of paragraphs (a) and (b) of §60.4207, may petition the Administrator for approval of alternative emission standards, if they can demonstrate that they use a fuel that is not the fuel on which the manufacturer of the engine certified the engine and that the engine cannot meet the applicable standards required in §60.4202 or §60.4203 using such fuels.

(b) [Reserved]

General Provisions

§ 60.4218 What parts of the General Provisions apply to me?

Table 8 to this subpart shows which parts of the General Provisions in §§60.1 through 60.19 apply to you.

Definitions

§ 60.4219 What definitions apply to this subpart?

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

Combustion turbine means all equipment, including but not limited to the turbine, the fuel, air, lubrication and exhaust gas systems, control systems (except emissions control equipment), and any ancillary components and sub-components comprising any simple cycle combustion turbine, any regenerative/recuperative cycle combustion turbine, the combustion turbine portion of any cogeneration cycle combustion system, or the combustion turbine portion of any combined cycle steam/electric generating system.

Compression ignition means relating to a type of stationary internal combustion engine that is not a spark ignition engine.

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 number 2 distillate oil.

Diesel particulate filter means an emission control technology that reduces PM emissions by trapping the particles in a flow filter substrate and periodically removes the collected particles by either physical action or by oxidizing (burning off) the particles in a process called regeneration.

Emergency stationary internal combustion engine means any stationary internal combustion engine whose operation is limited to emergency situations and required testing and maintenance. Examples include stationary ICE 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 ICE used to pump water in the case of fire or flood, etc. Stationary CI ICE used to supply power to an electric grid or that supply power as part of a financial arrangement with another entity are not considered to be emergency engines.

Engine manufacturer means the manufacturer of the engine. See the definition of “manufacturer” in this section.

Fire pump engine means an emergency stationary internal combustion engine certified to NFPA requirements that is used to provide power to pump water for fire suppression or protection.

Manufacturer has the meaning given in section 216(1) of the Act. In general, this term includes any person who manufactures a stationary engine for sale in the United States or otherwise introduces a new stationary engine into commerce in the United States. This includes importers who import stationary engines for sale or resale.

Maximum engine power means maximum engine power as defined in 40 CFR 1039.801.

Model year means either:

(1) The calendar year in which the engine was originally produced, or

(2) The annual new model production period of the engine manufacturer if it is different than the calendar year. This must include January 1 of the calendar year for which the model year is named. It may not begin before January 2 of the previous calendar year and it must end by December 31 of the named calendar year. For an engine that is converted to a stationary engine after being placed into service as a nonroad or other non-stationary engine, model year means the calendar year or new model production period in which the engine was originally produced.

Other internal combustion engine means any internal combustion engine, except combustion turbines, which is not a reciprocating internal combustion engine or rotary internal combustion engine.

Reciprocating internal combustion engine means any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work.

Rotary internal combustion engine means any internal combustion engine which uses rotary motion to convert heat energy into mechanical work.

Spark ignition means relating to a gasoline, natural gas, or liquefied petroleum gas 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 internal combustion engine means any internal combustion engine, except combustion turbines, that converts heat energy into mechanical work and is not mobile. Stationary ICE differ from mobile ICE in that a stationary internal combustion engine is not a nonroad engine as defined at 40 CFR 1068.30 (excluding paragraph (2)(ii) of that definition), and is not used to propel a motor vehicle or a vehicle used solely for competition. Stationary ICE include reciprocating ICE, rotary ICE, and other ICE, except combustion turbines.

Subpart means 40 CFR part 60, subpart IIII.

Useful life means the period during which the engine is designed to properly function in terms of reliability and fuel consumption, without being remanufactured, specified as a number of hours of operation or calendar years, whichever comes first. The values for useful life for stationary CI ICE with a displacement of less than 10 liters per cylinder are given in 40 CFR 1039.101(g). The values for useful life for stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder are given in 40 CFR 94.9(a).

Table 1 to Subpart IIII of Part 60—Emission Standards for Stationary Pre-2007 Model Year Engines With a Displacement of <10 Liters per Cylinder and 2007–2010 Model Year Engines >2,237 KW (3,000 HP) and With a Displacement of <10 Liters per Cylinder

[As stated in §§60.4201(b), 60.4202(b), 60.4204(a), and 60.4205(a), you must comply with the following emission standards]

Maximum engine power	Emission standards for stationary pre-2007 model year engines with a displacement of <10 liters per cylinder and 2007–2010 model year engines >2,237 KW (3,000 HP) and with a displacement of <10 liters per cylinder in g/KW-hr (g/HP-hr)				
	NMHC + NO_X	HC	NO_X	CO	PM
KW<8 (HP<11)	10.5 (7.8)			8.0 (6.0)	1.0 (0.75)
8≤KW<19 (11≤HP<25)	9.5 (7.1)			6.6 (4.9)	0.80 (0.60)
19≤KW<37 (25≤HP<50)	9.5 (7.1)			5.5 (4.1)	0.80 (0.60)
37≤KW<56 (50≤HP<75)			9.2 (6.9)		
56≤KW<75 (75≤HP<100)			9.2 (6.9)		
75≤KW<130 (100≤HP<175)			9.2 (6.9)		
130≤KW<225 (175≤HP<300)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)
225≤KW<450 (300≤HP<600)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)
450≤KW≤560 (600≤HP≤750)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)
KW>560 (HP>750)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)

Table 2 to Subpart IIII of Part 60—Emission Standards for 2008 Model Year and Later Emergency Stationary CI ICE <37 KW (50 HP) With a Displacement of <10 Liters per Cylinder

[As stated in §60.4202(a)(1), you must comply with the following emission standards]

Engine power	Emission standards for 2008 model year and later emergency stationary CI ICE <37 KW (50 HP) with a displacement of <10 liters per cylinder in g/KW-hr (g/HP-hr)			
	Model year(s)	NO_X+ NMHC	CO	PM

KW<8 (HP<11)	2008+	7.5 (5.6)	8.0 (6.0)	0.40 (0.30)
8≤KW<19 (11≤HP<25)	2008+	7.5 (5.6)	6.6 (4.9)	0.40 (0.30)
19≤KW<37 (25≤HP<50)	2008+	7.5 (5.6)	5.5 (4.1)	0.30 (0.22)

Table 3 to Subpart IIII of Part 60—Certification Requirements for Stationary Fire Pump Engines

[As stated in §60.4202(d), you must certify new stationary fire pump engines beginning with the following model years:]

Engine power	Starting model year engine manufacturers must certify new stationary fire pump engines according to §60.4202(d)
KW<75 (HP<100)	2011
75≤KW<130 (100≤HP<175)	2010
130≤KW≤560 (175≤HP≤750)	2009
KW>560 (HP>750)	2008

Table 4 to Subpart IIII of Part 60—Emission Standards for Stationary Fire Pump Engines

[As stated in §§60.4202(d) and 60.4205(c), you must comply with the following emission standards for stationary fire pump engines]

Maximum engine power	Model year(s)	NMHC + NO_X	CO	PM
KW<8 (HP<11)	2010 and earlier	10.5 (7.8)	8.0 (6.0)	1.0 (0.75)
	2011+	7.5 (5.6)		0.40 (0.30)
8≤KW<19 (11≤HP<25)	2010 and earlier	9.5 (7.1)	6.6 (4.9)	0.80 (0.60)
	2011+	7.5 (5.6)		0.40 (0.30)
19≤KW<37 (25≤HP<50)	2010 and earlier	9.5 (7.1)	5.5 (4.1)	0.80 (0.60)
	2011+	7.5 (5.6)		0.30 (0.22)
37≤KW<56 (50≤HP<75)	2010 and earlier	10.5 (7.8)	5.0 (3.7)	0.80 (0.60)
	2011+[1]	4.7 (3.5)		0.40 (0.30)
56≤KW<75 (75≤HP<100)	2010 and earlier	10.5 (7.8)	5.0 (3.7)	0.80 (0.60)
	2011+[1]	4.7 (3.5)		0.40 (0.30)
75≤KW<130 (100≤HP<175)	2009 and earlier	10.5 (7.8)	5.0 (3.7)	0.80 (0.60)
	2010+[2]	4.0 (3.0)		0.30 (0.22)

130≤KW<225 (175≤HP<300)	2008 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	2009+[3]	4.0 (3.0)		0.20 (0.15)
225≤KW<450 (300≤HP<600)	2008 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	2009+[3]	4.0 (3.0)		0.20 (0.15)
450≤KW≤560 (600≤HP≤750)	2008 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	2009+	4.0 (3.0)		0.20 (0.15)
KW>560 (HP>750)	2007 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	2008+	6.4 (4.8)		0.20 (0.15)

[1]For model years 2011–2013, manufacturers, owners and operators of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 revolutions per minute (rpm) may comply with the emission limitations for 2010 model year engines.

[2]For model years 2010–2012, manufacturers, owners and operators of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 rpm may comply with the emission limitations for 2009 model year engines.

[3]In model years 2009–2011, manufacturers of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 rpm may comply with the emission limitations for 2008 model year engines.

Table 5 to Subpart IIII of Part 60—Labeling and Recordkeeping Requirements for New Stationary Emergency Engines

[You must comply with the labeling requirements in §60.4210(f) and the recordkeeping requirements in §60.4214(b) for new emergency stationary CI ICE beginning in the following model years:]

Engine power	Starting model year
19≤KW<56 (25≤HP<75)	2013
56≤KW<130 (75≤HP<175)	2012
KW≥130 (HP≥175)	2011

Table 6 to Subpart IIII of Part 60—Optional 3-Mode Test Cycle for Stationary Fire Pump Engines

[As stated in §60.4210(g), manufacturers of fire pump engines may use the following test cycle for testing fire pump engines:]

Mode No.	Engine speed[1]	Torque (percent)[2]	Weighting factors
1	Rated	100	0.30
2	Rated	75	0.50
3	Rated	50	0.20

[1]Engine speed: ±2 percent of point.

[2]Torque: NFPA certified nameplate HP for 100 percent point. All points should be ±2 percent of engine percent load value.

Table 7 to Subpart IIII of Part 60—Requirements for Performance Tests for Stationary CI ICE With a Displacement of ≥30 Liters per Cylinder

[As stated in §60.4213, you must comply with the following requirements for performance tests for stationary CI ICE with a displacement of ≥30 liters per cylinder:]

For each	Complying with the requirement to	You must	Using	According to the following requirements
1. Stationary CI internal combustion engine with a displacement of ≥30 liters per cylinder	a. Reduce NO_X emissions by 90 percent or more	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, appendix A	(a) Sampling sites must be located at the inlet and outlet of the control device.
		ii. Measure O_2 at the inlet and outlet of the control device;	(2) Method 3, 3A, or 3B of 40 CFR part 60, appendix A	(b) Measurements to determine O_2 concentration must be made at the same time as the measurements for NO_X concentration.
		iii. If necessary, measure moisture content at the inlet and outlet of the control device; and,	(3) Method 4 of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03 (incorporated by reference, see §60.17)	(c) Measurements to determine moisture content must be made at the same time as the measurements for NO_X concentration.
		iv. Measure NO_X at the inlet and outlet of the control device	(4) Method 7E of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03 (incorporated by reference, see §60.17)	(d) NO_X concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
	b. Limit the concentration of	i. Select the sampling port	(1) Method 1 or 1A of 40 CFR	(a) If using a control device, the sampling

	NO_X in the stationary CI internal combustion engine exhaust.	location and the number of traverse points;	part 60, appendix A	site must be located at the outlet of the control device.
		ii. Determine the O_2 concentration of the stationary internal combustion engine exhaust at the sampling port location; and,	(2) Method 3, 3A, or 3B of 40 CFR part 60, appendix A	(b) Measurements to determine O_2 concentration must be made at the same time as the measurement for NO_X concentration.
		iii. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and,	(3) Method 4 of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03 (incorporated by reference, see §60.17)	(c) Measurements to determine moisture content must be made at the same time as the measurement for NO_X concentration.
		iv. Measure NO_X at the exhaust of the stationary internal combustion engine	(4) Method 7E of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03 (incorporated by reference, see §60.17)	(d) NO_X concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
	c. Reduce PM emissions by 60 percent or more	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, appendix A	(a) Sampling sites must be located at the inlet and outlet of the control device.
		ii. Measure O_2 at the inlet and outlet of the control device;	(2) Method 3, 3A, or 3B of 40 CFR part 60, appendix A	(b) Measurements to determine O_2 concentration must be made at the same time as the measurements for PM

				concentration.
		iii. If necessary, measure moisture content at the inlet and outlet of the control device; and	(3) Method 4 of 40 CFR part 60, appendix A	(c) Measurements to determine and moisture content must be made at the same time as the measurements for PM concentration.
		iv. Measure PM at the inlet and outlet of the control device	(4) Method 5 of 40 CFR part 60, appendix A	(d) PM concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
	d. Limit the concentration of PM in the stationary CI internal combustion engine exhaust	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, appendix A	(a) If using a control device, the sampling site must be located at the outlet of the control device.
		ii. Determine the O_2concentration of the stationary internal combustion engine exhaust at the sampling port location; and	(2) Method 3, 3A, or 3B of 40 CFR part 60, appendix A	(b) Measurements to determine O_2concentration must be made at the same time as the measurements for PM concentration.
		iii. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and	(3) Method 4 of 40 CFR part 60, appendix A	(c) Measurements to determine moisture content must be made at the same time as the measurements for PM concentration.
		iv. Measure PM at the exhaust of the stationary internal combustion engine	(4) Method 5 of 40 CFR part 60, appendix A	(d) PM concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.

Table 8 to Subpart IIII of Part 60—Applicability of General Provisions to Subpart IIII

[As stated in §60.4218, you must comply with the following applicable General Provisions:]

General Provisions citation	Subject of citation	Applies to subpart	Explanation
§60.1	General applicability of the General Provisions	Yes	
§60.2	Definitions	Yes	Additional terms defined in §60.4219.
§60.3	Units and abbreviations	Yes	
§60.4	Address	Yes	
§60.5	Determination of construction or modification	Yes	
§60.6	Review of plans	Yes	
§60.7	Notification and Recordkeeping	Yes	Except that §60.7 only applies as specified in §60.4214(a).
§60.8	Performance tests	Yes	Except that §60.8 only applies to stationary CI ICE with a displacement of (≥30 liters per cylinder and engines that are not certified.
§60.9	Availability of information	Yes	
§60.10	State Authority	Yes	
§60.11	Compliance with standards and maintenance requirements	No	Requirements are specified in subpart IIII.
§60.12	Circumvention	Yes	
§60.13	Monitoring requirements	Yes	Except that §60.13 only applies to stationary CI ICE with a displacement of (≥30 liters per cylinder.
§60.14	Modification	Yes	
§60.15	Reconstruction	Yes	
§60.16	Priority list	Yes	
§60.17	Incorporations by reference	Yes	
§60.18	General control device requirements	No	

§60.19	General notification and reporting requirements	Yes	

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

Source: 69 FR 33506, June 15, 2004, unless otherwise noted.

What This Subpart Covers

§ 63.6580 What is the purpose of subpart ZZZZ?

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

[73 FR 3603, Jan. 18, 2008]

§ 63.6585 Am I subject to this subpart?

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

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

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

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

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

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

[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.

(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 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;

(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.

(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.

(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 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 proposed emission limitations or the promulgated emission limitations no later than February 10, 2005 or no later than 180 days after startup of the source, whichever is later, according to §63.7(a)(2)(ix).

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

§ 63.6615 When must I conduct subsequent performance tests?

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

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

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

(b) Each performance test must be conducted according to the requirements that this subpart specifies in Table 4 to this subpart. If you own or operate a non-operational stationary RICE that is subject to performance testing, you do not need to start up the engine solely to conduct the performance test. Owners and operators of a non-operational engine can conduct the performance test when the engine is started up again.

(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:

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

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_2). If pollutant concentrations are to be corrected to 15 percent oxygen and CO_2 concentration is measured in lieu of oxygen concentration measurement, a CO_2 correction factor is needed. Calculate the CO_2 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:

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

Where:

F_o= Fuel factor based on the ratio of oxygen volume to the ultimate CO_2volume 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, dsm^3 /J (dscf/10^6 Btu).

F_c= Ratio of the volume of CO_2produced to the gross calorific value of the fuel from Method 19, dsm^3 /J (dscf/10^6 Btu).

(ii) Calculate the CO_2correction factor for correcting measurement data to 15 percent oxygen, as follows:

$$X_{co_2} = \frac{5.9}{F_o} \qquad \text{(Eq. 3)}$$

Where:

X_{co2}= CO_2correction factor, percent.

5.9 = 20.9 percent O_2−15 percent O_2, the defined O_2correction value, percent.

(iii) Calculate the $NO_x$and SO_2gas concentrations adjusted to 15 percent O_2using CO_2as follows:

$$C_{adj} = C_d \frac{X_{co_2}}{\%CO_2} \qquad \text{(Eq. 4)}$$

Where:

%CO_2= Measured CO_2concentration measured, dry basis, percent.

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

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

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

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

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

(4) A discussion identifying the methods you will use to measure and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and

(5) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.

(h) If you petition the Administrator for approval of no operating limitations, your petition must include the information described in paragraphs (h)(1) through (7) of this section.

(1) Identification of the parameters associated with operation of the stationary RICE and any emission control device which could change intentionally (*e.g.,* operator adjustment, automatic controller adjustment, etc.) or unintentionally (*e.g.,* wear and tear, error, etc.) on a routine basis or over time;

(2) A discussion of the relationship, if any, between changes in the parameters and changes in HAP emissions;

(3) For the parameters which could change in such a way as to increase HAP emissions, a discussion of whether establishing limitations on the parameters would serve to limit HAP emissions;

(4) For the parameters which could change in such a way as to increase HAP emissions, a discussion of how you could establish upper and/or lower values for the parameters which would establish limits on the parameters in operating limitations;

(5) For the parameters, a discussion identifying the methods you could use to measure them and the instruments you could use to monitor them, as well as the relative accuracy and precision of the methods and instruments;

(6) For the parameters, a discussion identifying the frequency and methods for recalibrating the instruments you could use to monitor them; and

(7) A discussion of why, from your point of view, it is infeasible or unreasonable to adopt the parameters as operating limitations.

(i) The engine percent load during a performance test must be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. A written report of the average percent load determination must be included in the notification of compliance status. The following information must be included in the written report: the engine model number, the engine manufacturer, the year of purchase, the manufacturer's site-rated brake horsepower, the ambient temperature, pressure, and humidity during the performance test, and all assumptions that were made to estimate or calculate percent load during the performance test must be clearly explained. If measurement devices such as flow meters, kilowatt meters, beta analyzers, stain gauges, etc. are used, the model number of the measurement device, and an estimate of its accurate in percentage of true value must be provided.

[69 FR 33506, June 15, 2004, as amended at 75 FR 9676, Mar. 3, 2010]

§ 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_2 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_2 concentration.

(b) If you are required to install a continuous parameter monitoring system (CPMS) as specified in Table 5 of this subpart, you must install, operate, and maintain each CPMS according to the requirements in paragraphs (b)(1) through (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.

(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.

(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 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 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.

(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?

(a) You must submit each report in Table 7 of this subpart that applies to you.

(b) Unless the Administrator has approved a different schedule for submission of reports under §63.10(a), you must submit each report by the date in Table 7 of this subpart and according to the requirements in paragraphs (b)(1) through (b)(9) of this section.

(1) For semiannual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.6595 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in §63.6595.

(2) For semiannual Compliance reports, the first Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in §63.6595.

(3) For semiannual Compliance reports, each subsequent Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(4) For semiannual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(5) For each stationary RICE that is subject to permitting regulations pursuant to 40 CFR part 70 or 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6 (a)(3)(iii)(A), you may submit the first and subsequent Compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (b)(1) through (b)(4) of this section.

(6) For annual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.6595 and ending on December 31.

(7) For annual Compliance reports, the first Compliance report must be postmarked or delivered no later than January 31 following the end of the first calendar year after the compliance date that is specified for your affected source in §63.6595.

(8) For annual Compliance reports, each subsequent Compliance report must cover the annual reporting period from January 1 through December 31.

(9) For annual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than January 31.

(c) The Compliance report must contain the information in paragraphs (c)(1) through (6) of this section.

(1) Company name and address.

(2) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) If you had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with §63.6605(b), including actions taken to correct a malfunction.

(5) If there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period.

(6) If there were no periods during which the continuous monitoring system (CMS), including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period.

(d) For each deviation from an emission or operating limitation that occurs for a stationary RICE where you are not using a CMS to comply with the emission or operating limitations in this subpart, the Compliance report must contain the information in paragraphs (c)(1) through (4) of this section and the information in paragraphs (d)(1) and (2) of this section.

(1) The total operating time of the stationary RICE at which the deviation occurred during the reporting period.

(2) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

(e) For each deviation from an emission or operating limitation occurring for a stationary RICE where you are using a CMS to comply with the emission and operating limitations in this subpart, you must include information in paragraphs (c)(1) through (4) and (e)(1) through (12) of this section.

(1) The date and time that each malfunction started and stopped.

(2) The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks.

(3) The date, time, and duration that each CMS was out-of-control, including the information in §63.8(c)(8).

(4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period.

(5) A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period.

(6) A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.

(7) A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total operating time of the stationary RICE at which the CMS downtime occurred during that reporting period.

(8) An identification of each parameter and pollutant (CO or formaldehyde) that was monitored at the stationary RICE.

(9) A brief description of the stationary RICE.

(10) A brief description of the CMS.

(11) The date of the latest CMS certification or audit.

(12) A description of any changes in CMS, processes, or controls since the last reporting period.

(f) Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6 (a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a Compliance report pursuant to Table 7 of this subpart along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the Compliance report includes all required information concerning deviations from any emission or operating limitation in this subpart, submission of the Compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a Compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority.

(g) If you are operating as a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must submit an annual report according to Table 7 of this subpart by the date specified unless the Administrator has approved a different schedule, according to the information described in paragraphs (b)(1) through (b)(5) of this section. You must report the data specified in (g)(1) through (g)(3) of this section.

(1) Fuel flow rate of each fuel and the heating values that were used in your calculations. You must also demonstrate that the percentage of heat input provided by landfill gas or digester gas is equivalent to 10 percent or more of the total fuel consumption on an annual basis.

(2) The operating limits provided in your federally enforceable permit, and any deviations from these limits.

(3) Any problems or errors suspected with the meters.

[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.

(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.

(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.

(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 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 or 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_2.

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.

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_2.

Lean burn engine means any two-stroke or four-stroke spark ignited engine that does not meet the definition of a rich burn engine.

Limited use stationary RICE means any stationary RICE that operates less than 100 hours per year.

Liquefied petroleum gas means any liquefied hydrocarbon gas obtained as a by-product in petroleum refining of natural gas production.

Liquid fuel means any fuel in liquid form at standard temperature and pressure, including but not limited to diesel, residual/crude oil, kerosene/naphtha (jet fuel), and gasoline.

Major Source, as used in this subpart, shall have the same meaning as in §63.2, except that:

(1) Emissions from any oil or gas exploration or production well (with its associated equipment (as defined in this section)) and emissions from any pipeline compressor station or pump station shall not be aggregated with emissions from other similar units, to determine whether such emission points or stations are major sources, even when emission points are in a contiguous area or under common control;

(2) For oil and gas production facilities, emissions from processes, operations, or equipment that are not part of the same oil and gas production facility, as defined in §63.1271 of subpart HHH of this part, shall not be aggregated;

(3) For production field facilities, only HAP emissions from glycol dehydration units, storage vessel with the potential for flash emissions, combustion turbines and reciprocating internal combustion engines shall be aggregated for a major source determination; and

(4) Emissions from processes, operations, and equipment that are not part of the same natural gas transmission and storage facility, as defined in §63.1271 of subpart HHH of this part, shall not be aggregated.

Malfunction means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner which causes, or has the potential to cause, the emission limitations in an applicable standard to be exceeded. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

Natural gas means a naturally occurring mixture of hydrocarbon and non-hydrocarbon gases found in geologic formations beneath the Earth's surface, of which the principal constituent is methane. Natural gas may be field or pipeline quality.

Non-selective catalytic reduction (NSCR) means an add-on catalytic nitrogen oxides (NO_X) control device for rich burn engines that, in a two-step reaction, promotes the conversion of excess oxygen, NO_X, CO, and volatile organic compounds (VOC) into CO_2, nitrogen, and water.

Oil and gas production facility as used in this subpart means any grouping of equipment where hydrocarbon liquids are processed, upgraded (*i.e.,* remove impurities or other constituents to meet contract specifications), or stored prior to the point of custody transfer; or where natural gas is processed, upgraded, or stored prior to entering the natural gas transmission and storage source category. For purposes of a major source determination, facility (including a building, structure, or installation) means oil and natural gas production and processing equipment that is located within the boundaries of an individual surface site as defined in this section. Equipment that is part of a facility will typically be located within close proximity to other equipment located at the same facility. Pieces of production equipment or groupings of equipment located on different oil and gas leases, mineral fee tracts, lease tracts, subsurface or surface unit areas, surface fee tracts, surface lease tracts, or separate surface sites, whether or not connected by a road, waterway, power line or pipeline, shall not be considered part of the same facility. Examples of facilities in the oil and natural gas production source category include, but are not limited to, well sites, satellite tank batteries, central tank batteries, a compressor station that transports natural gas to a natural gas processing plant, and natural gas processing plants.

Oxidation catalyst means an add-on catalytic control device that controls CO and VOC by oxidation.

Peaking unit or engine means any standby engine intended for use during periods of high demand that are not emergencies.

Percent load means the fractional power of an engine compared to its maximum manufacturer's design capacity at engine site conditions. Percent load may range between 0 percent to above 100 percent.

Potential to emit means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the stationary source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable. For oil and natural gas production facilities subject to subpart HH of this part, the potential to emit provisions in §63.760(a) may be used. For natural gas transmission and storage facilities subject to subpart HHH of this part, the maximum annual facility gas throughput for storage facilities may be determined according to §63.1270(a)(1) and the maximum annual throughput for transmission facilities may be determined according to §63.1270(a)(2).

Production field facility means those oil and gas production facilities located prior to the point of custody transfer.

Production well means any hole drilled in the earth from which crude oil, condensate, or field natural gas is extracted.

Propane means a colorless gas derived from petroleum and natural gas, with the molecular structure C_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 PPPPP of this part, that tests stationary RICE.

Stoichiometric means the theoretical air-to-fuel ratio required for complete combustion.

Storage vessel with the potential for flash emissions means any storage vessel that contains a hydrocarbon liquid with a stock tank gas-to-oil ratio equal to or greater than 0.31 cubic meters per liter and an American Petroleum Institute gravity equal to or greater than 40 degrees and an actual annual average hydrocarbon liquid throughput equal to or greater than 79,500 liters per day. Flash emissions occur when dissolved hydrocarbons in the fluid evolve from solution when the fluid pressure is reduced.

Subpart means 40 CFR part 63, subpart ZZZZ.

Surface site means any combination of one or more graded pad sites, gravel pad sites, foundations, platforms, or the immediate physical location upon which equipment is physically affixed.

Two-stroke engine means a type of engine which completes the power cycle in single crankshaft revolution by combining the intake and compression operations into one stroke and the power and exhaust operations into a second stroke. This system requires auxiliary scavenging and inherently runs lean of stoichiometric.

[69 FR 33506, June 15, 2004, as amended at 71 FR 20467, Apr. 20, 2006; 73 FR 3607, Jan. 18, 2008; 75 FR 9679, Mar. 3, 2010; 75 FR 51592, Aug. 20, 2010; 76 FR 12867, Mar. 9, 2011]

Table 1ato 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	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

	percent or more until June 15, 2007 or	which time the non-startup emission limitations apply.[1]
	b. Limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O_2	

[1]Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.

[75 FR 9679, Mar. 3, 2010, as amended at 75 FR 51592, Aug. 20, 2010]

Table 1bto 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 O2 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 O2 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 O2 and not using NSCR; or 4SRB stationary RICE complying with the	Comply with any operating limitations approved by the Administrator.

requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 2.7 ppmvd or less at 15 percent O2 and not using NSCR.	

[76 FR 12867, Mar. 9, 2011]

Table 2ato Subpart ZZZZ of Part 63—Emission Limitations for New and Reconstructed 2SLB and Compression Ignition Stationary RICE >500 HP and New and Reconstructed 4SLB Stationary RICE ≥250 HP Located at a Major Source of HAP Emissions

As stated in §§63.6600 and 63.6640, you must comply with the following emission limitations for new and reconstructed lean burn and new and reconstructed compression ignition stationary RICE at 100 percent load plus or minus 10 percent:

For each . . .	You must meet the following emission limitation, except during periods of startup . . .	During periods of startup you must . . .
1. 2SLB stationary RICE	a. Reduce CO emissions by 58 percent or more; or b. Limit concentration of formaldehyde in the stationary RICE exhaust to 12 ppmvd or less at 15 percent O_2. 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_2until 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.[1]
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_2	
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_2	

[1]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 2bto 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 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	a. maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst that was measured during the initial performance test; and b. maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F.[1]
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	Comply with any operating limitations approved by the Administrator.

[1]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 2cto 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:

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .

1. Emergency stationary CI RICE and black start stationary CI RICE.[1]	a. Change oil and filter every 500 hours of operation or annually, whichever comes first;[2] 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.[3]	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.[3]
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;[2]	
	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.[3]	
3. Non-Emergency, non-black start CI stationary RICE 100≤HP≤300 HP	Limit concentration of CO in the stationary RICE exhaust to 230 ppmvd or less at 15 percent O_2	
4. Non-Emergency, non-black start CI stationary RICE 300<HP≤500	a. Limit concentration of CO in the stationary RICE exhaust to 49 ppmvd or less at 15 percent O_2; 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_2; or	
	b. Reduce CO emissions by 70 percent or more.	

6. Emergency stationary SI RICE and black start stationary SI RICE.[1]	a. Change oil and filter every 500 hours of operation or annually, whichever comes first;[2]	
	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.[3]	
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;[2]	
	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.[3]	
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;[2]	
	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.[3]	
9. Non-emergency, non-	Limit concentration of CO	

black start 2SLB stationary RICE 100≤HP≤500	in the stationary RICE exhaust to 225 ppmvd or less at 15 percent O_2	
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_2	
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_2	
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_2	

[1]If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule required in Table 2c of this subpart, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the work practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.

[2]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.

[3]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 2dto 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;[1]	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_2; or	
	b. Reduce CO emissions by 70 percent or more.	
3. Non-Emergency, non-black start CI stationary RICE >500 HP	a. Limit concentration of CO in the stationary RICE exhaust to 23 ppmvd at 15 percent O_2; or	
	b. Reduce CO emissions by 70 percent or more.	
4. Emergency stationary CI RICE and black start stationary CI RICE.[2]	a. Change oil and filter every 500 hours of operation or annually, whichever comes first;[1]	
	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.[2]	a. Change oil and filter every 500 hours of operation or annually, whichever comes first;[1] 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;[1]	
	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 comes first, and replace as necessary.	
7. Non-emergency, non-black start 4SLB stationary RICE ≤500 HP	a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first;[1]	
	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_2; or	
	b. Reduce CO emissions by 93 percent or more.	
9. Non-emergency, non-black start 4SRB stationary RICE ≤500 HP	a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first;[1]	
	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_2; or	
	b. Reduce formaldehyde emissions by 76 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;[1]	
	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.	

[1]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.

[2]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:

For each . . .	Complying with the requirement to . . .	You must . . .
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.[1]
2. 4SRB stationary RICE with a brake horsepower ≥5,000 located at major sources	Reduce formaldehyde emissions	Conduct subsequent performance tests semiannually.[1]
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.[1]
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	Limit or reduce CO or formaldehyde emissions	Conduct subsequent performance tests every 8,760 hrs. or 3 years, whichever comes first.

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		
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.

[1]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_2at the inlet and outlet of the control device; and	(1) Portable CO and O_2analyzer	(a) Using ASTM D6522–00 (2005)[a](incorporated by reference, see §63.14). Measurements to determine O_2must be made at the same time as the measurements for CO concentration.
		ii. Measure the CO at the inlet and the outlet of the control device	(1) Portable CO and O_2analyzer	(a) Using ASTM D6522–00 (2005)[ab](incorporated by reference, see §63.14) or Method 10 of 40 CFR appendix A. The CO concentration must be at 15 percent O_2, dry basis.
2. 4SRB stationary RICE	a. Reduce formaldehyde emissions	i. Select the sampling port location and the number of traverse	(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.

		points; and		
		ii. Measure O_2at 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_2concentration 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,[c]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_2, 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_2concentration 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_2concentration must be made at the same time and location as the measurements for formaldehyde concentration.
		iii. Measure	(1) Method 4 of 40	(a) Measurements to

		moisture content of the stationary RICE exhaust at the sampling port location; and	CFR part 60, appendix A, or Test Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03	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,[c]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_2, 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),[a]Method 320 of 40 CFR part 63, appendix A, or ASTM D6348–03	(a) CO Concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour longer runs.

[a]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.

[b]You may also use Method 320 of 40 CFR part 63, appendix A, or ASTM D6348–03.

[c]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-emergency 2SLB stationary RICE >500 HP located at a major source of	a. Reduce CO emissions and using oxidation catalyst,	i. The average reduction of emissions of CO determined from the initial performance test achieves

HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, non-emergency stationary CI RICE >500 HP located at a major source of HAP, 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	and using a CPMS	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.
2. 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, using oxidation catalyst, and using a CPMS	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.
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, 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 not using oxidation catalyst	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.
4. Non-emergency stationary CI RICE >500 HP located at a major	a. Limit the concentration of CO,	i. The average CO concentration determined from the initial

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	and not using oxidation catalyst	performance test is less than or equal to the CO emission limitation; and ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and 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 ≥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_2or CO_2at 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_2or CO_2at 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 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≤HP≤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_2, 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.
11. 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≤HP≤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 not using oxidation catalyst or NSCR	i. The average formaldehyde concentration, corrected to 15 percent O_2, dry basis, from the three test runs is less than or equal to the formaldehyde emission limitation; and ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and
		iii. You have recorded the approved operating parameters (if any) during the initial performance test.
12. Existing non-emergency stationary RICE 100≤HP≤500 located at a major source of HAP, and existing non-emergency stationary CI RICE 300<HP≤500 located at an area source of HAP	a. Reduce CO or formaldehyde emissions	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.
13. Existing non-emergency stationary RICE 100≤HP≤500 located at a major source of HAP, and existing non-emergency stationary CI RICE 300<HP≤500 located at an area source of HAP	a. Limit the concentration of formaldehyde or CO in the stationary RICE exhaust	i. The average formaldehyde or CO concentration, as applicable, corrected to 15 percent O_2, dry basis, from the three test runs is less than or equal to the formaldehyde or CO emission limitation, as applicable.

[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 . . .
1. 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 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;[a] and ii. Collecting the catalyst inlet temperature data according to §63.6625(b); and iii. Reducing these data to 4-hour rolling averages; and iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
		v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
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	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;[a] and ii. Collecting the approved operating parameter (if any) data according to §63.6625(b); and

non-emergency CI stationary RICE >500 HP located at a major source of HAP		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 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.[a]
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;[a]and ii. Collecting the catalyst inlet temperature data according to §63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
		v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
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	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;[a]and

major source of HAP		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

		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	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

	oxidation catalyst or NSCR	that your emissions remain at or below the CO or formaldehyde concentration limit; and
		ii. Collecting the catalyst inlet temperature data according to §63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
		v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
13. Existing limited use CI stationary RICE >500 HP 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.

[a]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 submit a ...	The report must contain ...	You must submit the report ...
1. Existing non-emergency, non-black start stationary RICE 100≤HP≤500 located at a major source of HAP; existing non-emergency, non-black start stationary CI RICE >500 HP located at a major source of HAP; existing non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP; existing non-emergency, non-black start stationary CI RICE >300 HP located at an area source of HAP; existing non-emergency, non-black start 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP and operated more than 24 hours per calendar year; 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	Compliance report	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)	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).
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	Report	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	i. Annually, according to the requirements in §63.6650.

on an annual basis		provided by landfill gas or digester gas, is equivalent to 10 percent or more of the gross heat input on an annual basis; and	
		b. The operating limits provided in your federally enforceable permit, and any deviations from these limits; and	i. See item 2.a.i.
		c. Any problems or errors suspected with the meters.	i. See item 2.a.i.

[75 FR 51603, Aug. 20, 2010]

Table 8 to Subpart ZZZZ of Part 63—Applicability of General Provisions to Subpart ZZZZ.

As stated in §63.6665, you must comply with the following applicable general provisions.

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.1	General applicability of the General Provisions	Yes.	
§63.2	Definitions	Yes	Additional terms defined in §63.6675.
§63.3	Units and abbreviations	Yes.	
§63.4	Prohibited activities and circumvention	Yes.	
§63.5	Construction and reconstruction	Yes.	
§63.6(a)	Applicability	Yes.	
§63.6(b)(1)–(4)	Compliance dates for new and reconstructed sources	Yes.	
§63.6(b)(5)	Notification	Yes.	
§63.6(b)(6)	[Reserved]		
§63.6(b)(7)	Compliance dates for new and reconstructed area sources that become major sources	Yes.	
§63.6(c)(1)–(2)	Compliance dates for existing	Yes.	

	sources		
§63.6(c)(3)–(4)	[Reserved]		
§63.6(c)(5)	Compliance dates for existing area sources that become major sources	Yes.	
§63.6(d)	[Reserved]		
§63.6(e)	Operation and maintenance	No.	
§63.6(f)(1)	Applicability of standards	No.	
§63.6(f)(2)	Methods for determining compliance	Yes.	
§63.6(f)(3)	Finding of compliance	Yes.	
§63.6(g)(1)–(3)	Use of alternate standard	Yes.	
§63.6(h)	Opacity and visible emission standards	No	Subpart ZZZZ does not contain opacity or visible emission standards.
§63.6(i)	Compliance extension procedures and criteria	Yes.	
§63.6(j)	Presidential compliance exemption	Yes.	
§63.7(a)(1)–(2)	Performance test dates	Yes	Subpart ZZZZ contains performance test dates at §§63.6610, 63.6611, and 63.6612.
§63.7(a)(3)	CAA section 114 authority	Yes.	
§63.7(b)(1)	Notification of performance test	Yes	Except that §63.7(b)(1) only applies as specified in §63.6645.
§63.7(b)(2)	Notification of rescheduling	Yes	Except that §63.7(b)(2) only applies as specified in §63.6645.
§63.7(c)	Quality assurance/test plan	Yes	Except that §63.7(c) only applies as specified in §63.6645.
§63.7(d)	Testing facilities	Yes.	
§63.7(e)(1)	Conditions for conducting performance tests	No.	Subpart ZZZZ specifies conditions for conducting

			performance tests at §63.6620.
§63.7(e)(2)	Conduct of performance tests and reduction of data	Yes	Subpart ZZZZ specifies test methods at §63.6620.
§63.7(e)(3)	Test run duration	Yes.	
§63.7(e)(4)	Administrator may require other testing under section 114 of the CAA	Yes.	
§63.7(f)	Alternative test method provisions	Yes.	
§63.7(g)	Performance test data analysis, recordkeeping, and reporting	Yes.	
§63.7(h)	Waiver of tests	Yes.	
§63.8(a)(1)	Applicability of monitoring requirements	Yes	Subpart ZZZZ contains specific requirements for monitoring at §63.6625.
§63.8(a)(2)	Performance specifications	Yes.	
§63.8(a)(3)	[Reserved]		
§63.8(a)(4)	Monitoring for control devices	No.	
§63.8(b)(1)	Monitoring	Yes.	
§63.8(b)(2)–(3)	Multiple effluents and multiple monitoring systems	Yes.	
§63.8(c)(1)	Monitoring system operation and maintenance	Yes.	
§63.8(c)(1)(i)	Routine and predictable SSM	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.
		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.	
§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.	

Indiana Department of Environmental Management
Office of Air Quality

Addendum to the Technical Support Document (ATSD) for a Federally Enforceable State Operating Permit (FESOP)

Source Background and Description

Source Name:	**SDI LaFarga, LLC**
Source Location:	**1640 South Ryan Road, New Haven, Indiana 46774**
County:	**Allen**
SIC Code:	**3341 (Secondary Smelting and Refining Nonferrous Metals) 3351 (Rolling, Drawing, Extruding of Copper)**
Operation Permit No.:	**F003-30250-00384**
Permit Reviewer:	**Jack Harmon**

On July 16, 2011, the Office of Air Quality (OAQ) had a notice published in the Fort Wayne Journal Gazette, Ft. Wayne, Indiana, stating that SDI LaFarga, LLC had applied for a Federally Enforceable State Operating Permit (FESOP) to construct and operate a stationary copper rod production facility. The notice also stated that the OAQ proposed to issue a FESOP for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

Comments and Responses

During the public comment period of July 16, 2011 to August 15, 2011, written comments on the draft permit were submitted to IDEM OAQ. Due to scheduling a public meeting on the issues related to the draft permit, the comment period was extended until Monday, September 19, 2011. The listing of those citizens submitting written comments during this comment period are shown in Appendix A of this Amended Technical Support Document (ATSD).

The Technical Support Document (TSD) is used by IDEM, OAQ for historical purposes. IDEM, OAQ does not make any changes to the original TSD, but the Permit will have the updated changes. The comments and revised permit language are provided below with deleted language as ~~strikeouts~~ and new language **bolded**.

Comment 1:

Many citizens expressed concerns for human health, pet health, and property damage due to the level of pollutants that the source has the potential to emit. One citizen asked IDEM to set out the cumulative health effect of each of the pollutants. One citizen commented that research shows that copper processing causes Alzheimer's disease. Many citizens expressed concerns over the potential emissions because of the fact that there are schools and parks located in the area.

Response to Comment 1:

IDEM, OAQ understands the concerns of the commenters and other citizens in the community. The Office of Air Quality (OAQ) issues air pollution control permits to facilities that have the potential to emit regulated levels of pollutants into the air. Permits require sources to comply with all health-based and technology-based standards established by the U.S. EPA and the Indiana Air Pollution Control Board. Before the draft permit is made available to the public for review, a great deal of effort is made by IDEM, OAQ to ensure that the permit contains all applicable federal and state air pollution regulations and the

source is issued the correct permit level based on its potential to emit, and that the correct controls, monitoring, and reporting requirements are included in the permit to ensure that the source will be in compliance with these requirements contained in the permit. If an applicant demonstrates that it will be able to comply with all applicable federal and state laws regarding air pollution, IDEM is required by law to issue the permit.

Air emissions from sources are regulated because high levels of emissions can cause severe health effects, chronic health effects and death. The federal Clean Air Act requires the U.S. EPA to set National Ambient Air Quality Standards (NAAQS) for six criteria pollutants. These standards are set at levels that protect human health, including the health of sensitive persons, such as asthmatics, children and the elderly. The NAAQS are often referred to as the federal health standards for outdoor air. Detailed information about the health effects of these pollutants is available at http://www.epa.gov/air/urbanair/. The complete table of the NAAQS can be found at http://www.epa.gov/air/criteria.html on the Internet. Allen County is in attainment for all criteria pollutants. IDEM is unaware of any U.S. EPA finding or other conclusive link between copper processing and Alzheimer's disease.

The source's air emissions will also include some Hazardous Air Pollutants (HAPs). More information about these pollutants is available at http://www.epa.gov/air/airpollutants.html on U.S. EPA's website.

IDEM has drafted the air permit to limit the amount of emissions to the very lowest level allowed by law. In addition, IDEM performed computer modeling on the criteria pollutant emissions. For criteria pollutants, all maximum-modeled concentrations were compared to the respective NAAQS limit. All maximum-modeled concentrations were below the NAAQS limits.

Hazardous Air Pollutants (HAPs) are either carcinogenic or otherwise considered toxic. A HAP analysis was completed using the maximum estimated concentrations of each pollutant. This analysis offers a refined analysis that takes into account the different potencies and health effects that each pollutant presents to the public. The modeling produces a total cancer risk estimate. The total cancer risk estimate is the worst case probability of developing cancer from exposure to a pollutant or a mixture of pollutants over a 70 year lifetime, expressed as the number of additional cancer cases in a given number of people, e.g., one in a million. The cancer estimates for each pollutant are considered to be additive when deriving the cumulative maximum individual cancer risk.

The US EPA considers one in ten thousand (1.0E-04) excess cancer risks to be the upper range of acceptability with an ample margin of safety. The additive cancer risk estimate from all HAPs from this project is 0.045 additional cancer cases in one million people. This means if an individual was exposed to these HAPs continuously for 70 years, the risk of getting cancer from this exposure would be 0.045 in one million.

Non-cancer health effects are measured with a Hazard Quotient. The risk analysis cannot accurately predict whether there will be observed health problems around the source; rather it identifies possible avenues of risk. Pollutants with a Hazard Quotient greater than 1 are considered to be at concentrations that could represent a health concern. Hazard Quotients above 1 do not represent areas where adverse health effects will be observed, but indicate that the potential exists. The Hazard Index for this project, 0.016, does not exceed 1.

No changes have been made to the permit as the result of this comment.

Comment 2:

Many citizens who submitted written comments, as well as many others who signed a petition, expressed concerns over ongoing compliance issues with Superior Aluminum Alloys, located nearby that has some common ownership with SDI LaFarga, LLC.

Response to Comment 2:

IDEM, OAQ understands the concerns of the commenters and the other citizens in the community. However, this purpose of this public comment period was to address the concerns specific to the SDI LaFarga, LLC permit, number 003-30250-00384. Although IDEM understand the concerns of the citizens regarding Superior Aluminum Alloys, the SDI permit is the permit that is open for public comment.

Because these two sources have some common ownership, IDEM, OAQ did a source analysis to determine if these two sources should be permitted as one source. After completing this source evaluation, it was determined that the two sources should be considered as two separate sources for permitting purposes. This determination was explained in the Technical Support Document (TSD) that accompanied the draft permit that was available to the public during the comment period and is repeated here.

In order to consider both plants as one single source, all three of the following criteria must be met:

(1) The plants must have common ownership/control;

(2) The plants must have the same SIC code or one must serve as a support facility of the other; and

(3) The plants must be located on contiguous or adjacent properties.

Superior Aluminum is indirectly owned by SDI, Inc. and, therefore, is under SDI's control. SDI, Inc. also has an indirect majority ownership interest in SDI LaFarga. This majority ownership gives it the power to control SDI LaFarga; therefore, the two plants are under common ownership and common control, and meet the first part of the major source definition.

The Superior Aluminum plant produces aluminum and has a two-digit SIC Code 33 for the Major Group of Primary Metal Industries. The SDI LaFarga plant produces copper but will also be a primary metal producer and will have the same SIC Code of 33. Neither the Superior Aluminum plant nor the SDI LaFarga plant will dedicate any of its output to the other plant. Therefore, neither plant will serve as a support facility to the other. However, since the plants have the same SIC Code, they meet the second part of the major source definition.

The Superior plant and the SDI LaFarga plant will be located on different properties that are completely separated by a third party. The Superior Aluminum plant and the SDI LaFarga plant properties are approximately 1,460 feet apart at their closest point. Since the plants are not contiguous properties, IDEM examined whether the two plants are on adjacent properties. Though the two plants are relatively close together, there will be no materials transferred between the two plants; none of the employees of Superior will work at the LaFarga plant and none of the SDI LaFarga employees will work at the Superior Aluminum plant. There will be no splitting of the production process between the two plants. Therefore, the plants are not on adjacent properties and, therefore, do not meet the third part of the major source definition.

Since the plants do not meet all three parts of the definition, IDEM, OAQ, finds that they are not part of the same major source, as defined by 326 IAC 2-7-1(22). Therefore, each plant will be permitted separately. IDEM is basing this determination on SDI LaFarga's business plan. If the actual operations differ from the business plan, so that workers or materials are exchanged between the two plants, IDEM reserves the right to revisit this determination.

Therefore, since the two sources are considered as separate sources, the comments made regarding issues with Superior Aluminum cannot be considered a part of the evaluation of the SDI LaFarga permit.

If the commenters and citizens have current or future complaints or issues with the Superior Aluminum facility, with respect to compliance to its own permit, IDEM, OAQ recommends that citizens contact the current Compliance Inspector, Patrick Burton, at (260) 433-4538 or IDEM's Complaint Coordinator, at (800) 451-6027, extension 24464, to file a complaint. In addition, IDEM's Complaint Clearinghouse provides more information regarding filing complaints and is available at http://www.in.gov/contact/complaints/index.html on the Internet.

No changes were made to the permit as the result of this comment.

Comment 3:

Many citizens commented that the current air monitoring sites in Allen County are in locations that should be changed, due to shifts in location of industry and shifts in population location. Several citizens questioned how air quality is going to be monitored and tested, especially if the new plant will bring new technology. One citizen requested monthly testing requirements and to test east of the plant, due to wind direction influences. Several commenters requested that IDEM, OAQ perform and air quality analysis of the area around the site now to serve as a baseline to measure the impact of the SDI operation.

Response to Comment 3:

IDEM does not have the authority to require that SDI conduct air quality monitoring around its property. IDEM, OAQ understands the concern of the citizens regarding the locations of the Ambient Air Monitoring sites in Allen County. There are three air monitoring sites in Allen County. One is located at 2022 N. Beacon Street in Ft. Wayne, Indiana, and measures ozone (O_3), $PM_{2.5}$, and MET. The second is located at 203 East Douglas Street in Ft. Wayne, and measures CO. The third is at 14600 Amstutz Road in Leo, Indiana, in Allen County, and measures ozone (O_3). IDEM, OAQ follows US EPA guidance on locating its monitoring sites. These sites are place pursuant to a monitoring network plant and require U.S. EPA approval to relocate. The Indiana Ambient Air Monitoring Network Plan for 2012 is available on the IDEM website at http://www.in.gov/idem/4652.htm . A Network Review of this plan is conducted annually to determine any changes to be made to the network. Prior to submitting it to US EPA for its approval, this plan goes through a public comment period for input from the public, so the public has an opportunity input each year into this process. Information about Indiana's air monitoring system and monitoring results is available at http://www.in.gov/idem/4116.htm. Information about current and expected air pollution levels is on IDEM's SmogWatch site at http://www.in.gov/apps/idem/smog/ on the internet.

Sections D.1 and E.1 of the permit requires specific pollution controls, parametric monitoring, initial and recordkeeping, and reporting by the source to ensure compliance with its permit. Condition D.1.7 of the permit requires the source to perform reverberatory furnace stack testing for emissions of particulate matter (PM), fine particulate matter (PM10), very fine particulate matter (PM2.5), hydrogen chloride (HCl), and hydrogen fluoride (HF). In addition the source must do testing to show it is meeting the overall control efficiency (capture and destruction efficiencies) of the regenerative thermal oxidizer (RTO) to control emissions of volatile organic compounds (VOC). The source must also perform a one-time stack test to verify the nitrogen oxides (NOx), sulfur dioxide (SO2), and carbon monoxide (CO) emission factors from the reverberatory furnace.

All testing must be done within sixty (60) days after achieving maximum capacity, but not later than one hundred and eighty (180) days after initial startup, utilizing methods approved by IDEM. Except for the one-time stack test to confirm emission factors, these tests must be repeated at least once every five (5) years. All testing is done in accordance with the provisions of 326 Indiana Administrative Code (IAC) 3-6 (Source Sampling Procedures).

IDEM, OAQ feels that these specific pollution controls, parametric monitoring, testing, initial recordkeeping, and reporting requirements are sufficient to ensure compliance to the standards without the use of onsite or nearby monitoring equipment.

No changes were made to the permit as the result of this comment.

Comment 4:

Some citizens asked questions about fire protection and safety, and asked if the local fire department has the training and equipment to adequately deal with a fire or a hazardous spill from this site. One citizen asked what safety measures the company had in place for natural disasters such as tornados, etc.

Response to Comment 4:

There are several approvals that a source must obtain in order to be able to locate within a community. Issues such as fire protection, zoning laws, building codes, and various permitting requirements (building permits, air permits, land use permits, water permits, etc.) are among those approvals that may be needed before a source can build its facility. The IDEM, Office of Air Quality (OAQ) addresses regulations regarding a source's potential to emit pollutants and conducts a permit review to address the area of air pollution. By law, IDEM cannot address issues for which it does not have direct regulatory authority. Questions regarding issues such as local fire department capabilities must be directed to local authorities to address.

IDEM's Emergency Response Section is available 24 hours a day to receive spill reports and provide response assistance. The primary role of the section is to facilitate spill response actions from persons experiencing spills to soil and water. The section may also request assistance from the United States Environmental Protection Agency during air release emergencies. Environmental emergencies should be reported immediately to IDEM at 1-888-233-7745. This line is available 24 hours-a-day, every day.

No changes were made to the permit as the result of this comment.

Comment 5:

Several citizens expressed concerns that the SDI project has already been approved, since SDI officials made such comments in its public meetings held thus far. There has already been construction activity at the site.

Response to Comment 5:

Indiana's air emission rules provide the process that must be followed for each type of permit action. This permit is for a federally enforceable state operating permit (FESOP) permit. The draft permit is first approved internally by IDEM and then presented to the public for questions, comments and suggested changes. No permit decision is made until all public comments have been considered and the final permit is issued.

Regarding the comment about construction activity at the site, there are limits on construction activity prior to permit issuance. The source may prepare the site, install infrastructure, and even construct a building. To do so is at the sole risk of the source because there is no guarantee that a permit will be issued. The source cannot, however, install any equipment that could potentially emit pollutants until the final permit is issued. Emission unit installation prior to permit issuance would be a violation of the law and subject the source to enforcement action.

No changes were made to this permit as the result of this comment.

Comment 6:

Three citizens requested that SDI be required to purify its output emissions before they are released to

the atmosphere.

Response to Comment 6:

In order to ensure that the source controls its emissions in accordance with all applicable air emission standards, the permit requires the source to have various controls in place at all times that the operation is operating and to have monitoring systems in place to ensure that each control is operating correctly. As is shown in Section D of the permit, and as is explained in the Technical Support Document accompanying the permit, the source is required to clean and reduce its volatile organic compounds (VOC) emissions by the use of a regenerative thermal oxidizer, which destroys VOCs prior to the air exiting the facility. This oxidizer will destroy more than 95% of the VOC's thereby reducing its emissions. The source is also required to control its particulate emissions by the use of a dust collector (baghouse), which captures more than 99% of particulate emissions from being released to the atmosphere. To ensure control of hydrogen chloride (HCl) and hydrogen fluoride (HF), the source is required to inject lime into the exit airstream, which neutralizes and removes more than 98% of these pollutants. Testing and evaluation by IDEM and other air pollution control agencies has proven that these controls are the most effective way to control these emissions. IDEM feels that these controls and their monitoring requirements included in the permit are sufficient to ensure SDI's compliance with all applicable emissions standards.

No changes were made to the permit as the result of this comment.

Comment 7

One citizen asked if this new facility would increase the traffic on local roads.

Response to Comment 7:

IDEM, OAQ cannot address issues for which is has no direct regulatory authority. Such questions regarding the effects on traffic and local infrastructure around the plant must be addressed with local authorities having jurisdiction in this matter.

No changes were made to the permit as the result of this comment.

Comment 8:

One citizen asked how the company would be held accountable for its actions before an accident occurs.

Response to Comment 8:

IDEM, OAQ understands the comment that plant be held accountable for its actions. There are several types of accidents, such as environmental (unplanned air pollution, water pollution, leaks of a chemicals into the ground, etc.), occupational and safety accidents, fires, etc. OAQ cannot address issues for which is has no direct regulatory authority. With regard to air pollution issues, OAQ has written the permit as a federally enforceable document which contains many terms and conditions, for which the source is legally responsible and accountable. The permit contains details of limits, pollution controls, monitoring, initial testing, subsequent periodic testing, recordkeeping, reporting, and notification requirements in case there is an issue with equipment or emissions. Once a permit is approved and issued, the enforcement of the terms and conditions is administered by the Compliance and Enforcement Branch within the Office of Air Quality.

No changes were made to the permit as the result of this comment.
Comment 9:

One citizen commented and asked what compensation IDEM will make available for incidents such as the 2010 Superior Aluminum chlorine spill.

Response to Comment 9:

Anyone witnessing any chemical spill, hazardous material release, fish kill, oil spill or other environmental emergency, should immediately report it to IDEM at (888) 233-7745 (Toll-Free Nationwide). This emergency line is open 24 hours a day, 7 days a week.

IDEM has no authority to consider compensation for chemical spills in the air permit process. IDEM has no authority to award compensation to anyone as a result of any environmental spill or other environmental emergency.

Comment 10:

One citizen commented that some content of the draft permit is in Spanish, and that the permit review process should not begin until it is proposed in English.

Response to Comment 10:

The draft permit that is on file in the Allen County Public Library, and that was open for public comment, is entirely in English. However, the applicant is required, upon making its initial application to IDEM for a permit, to place a copy of the application on file with the local library, and the application did, in fact, contain a supporting document from the applicant that was in Spanish. The commenter may have been reading the initial application, assuming it was the draft permit. IDEM did not use or refer to any of the application's Spanish language documents in the permit process.

No changes were made to the permit as the result of this comment.

Comment 11:

One citizen commented that, in a letter accompanying the application, the source references NESHAP 40 CFR 63, Subpart XXXXXX (Nine Metal Fabrication and Finishing Source Categories). The commenter stated that the rule is actually for "Dry Blasting – Mechanical Cleaning of Surfaces" and asked IDEM to explain how the rule is related to the permit.

Response to Comment 11:

IDEM OAQ understands that this could be a concern, but IDEM disagrees with the commenter's conclusion. The applicant for an air quality permit has the responsibility to inform IDEM OAQ of any potential rules that may be applicable to the permit, and 40 CFR 63, Subpart XXXXXX was a possibly applicable rule. However, IDEM, OAQ performs its own evaluation of rule applicability. NESHAP 40 CFR 63, Subpart XXXXXX is for "Nine Metal Fabrication and Finishing Source Categories". In its evaluation, IDEM OAQ determined that this rule is not applicable to this source because it does not perform any of the activities listed in the rule. Therefore, this rule does not apply to the source, but was appropriate to be evaluated.

No changes were made to the permit as the result of this comment.

Comment 12:

A commenter stated that in a letter accompanying the application, the source references NESHAP 40 CFR 63, Subpart FFFFFF (Secondary Copper Smelters for Area Sources). The commenter stated that this rule does not exist and asked IDEM to explain how the rule is related to the permit.

Response to Comment 12:

IDEM OAQ understands that this question but disagrees with the commenter's conclusion. NESHAP 40 CFR 63, Subpart FFFFFF (Secondary Copper Smelters for Area Sources) does exist. This rule was evaluated because the source will process copper, and the evaluation was necessary to determine if the rule was applicable to this source. This rule is for copper smelters, and, in the definition section within the rule, it was determined that this rule was not applicable to this source because this source melts copper scrap and processes it to make a manufactured product, and, therefore, does not meet the definition of a smelter. Therefore, the rule does not apply to this source; however, it was necessary to evaluate this rule in the course of processing the draft air permit for this source.

No changes were made to the permit as the result of this comment.

Comment 13:

One citizen commented that IDEM OAQ must hold SDI accountable to the BACT standard and make the permit stringent. The commenter stated that this permit has not been approved by the EPA so IDEM is responsible for it.

Response to Comment 13:

IDEM, OAQ understands the concerns and the comment. Although the U.S. Environmental Protection Agency (EPA) does not always review every permit drafted or issued within the United States, this draft permit is within the laws and guidance set forth by the EPA. In the processing of an air permit application, there are two main parts to this process. First, there is a thorough evaluation of Federal Rules, under 40 CFR 60 (New Source Performance Standards), (NSPS), and under 40 CFR 63 (National Emission Standards for Hazardous Air Pollutants), (NESHAP). These two set of rules are direct EPA rules, and IDEM, OAQ has the responsibility to evaluate each and every permit application under each of these rules for applicability. Secondly, there are State Rules, authorized under Title 326 of the Indiana Administrative Code (326 IAC), that must be evaluated as well. These rules have been adopted under a State Implementation Plan (SIP) that must be approved by the EPA and cannot be changed without the written consent of the EPA. Therefore, all rules, limits, and conditions of every FESOP permit are federally enforceable. Both Federal Rule and State Rule evaluations are shown in the Technical Support Document (TSD) that accompanies every FESOP permit. Within IDEM, OAQ, the Compliance and Enforcement Branch has the responsibility and authority to enforce all of the provisions and requirements of all permits issued.

In this draft permit, IDEM, OAQ has applied all applicable rules to the permit, and is as stringent as the law allows. By applying the VOC BACT (Best Available Control Technology for Volatile Organic Compounds), set out in 326 Indiana Administrative Code (IAC) 8-1-6, IDEM, OAQ has limited the emissions from the reverberatory furnace, in accordance with the best available control technology available in the industry today, and the source is held to that limit, and must test and report accordingly. In all areas, this permit is as stringent as the law allows. Additionally, this air permit has monitoring, recordkeeping, and reporting requirements to ensure that the source will be in compliance with the terms and conditions contained in its permit. Every air quality permit is reviewed at several levels of the IDEM OAQ organization for completeness and correctness before it is issued.

No changes have been made to the permit as the result of this comment.

Comment 14:

One citizen asked who has the responsibility to ensure that the company will be in compliance at all times.

Response to Comment 14:

IDEM understands the concerns of the citizens that compliance to the permit is very important. The permit contains monitoring, testing, recordkeeping, and reporting that are designed to ensure that the source is in compliance to its permit. IDEM will inspect the source, will review all the reports submitted by the source, will approve all testing and will review all test results to evaluate SDI LaFarga's compliance status. If the commenters and citizens have complaints and issues with the source, with respect to compliance to its permit, IDEM, OAQ recommends that citizens contact the current Compliance Inspector, Patrick Burton, at (260) 433-4538. In addition, IDEM's Complaint Clearinghouse provides more information regarding filing complaints and is available at IDEM's website at http://www.in.gov/contact/complaints/index.html.

No changes were made to the permit as the result of this comment.

Comment 15:

Several citizens stated concern that the Allen County Council Members did not receive the notice of the public hearing and did not know about the permit.

Response to Comment 15:

IDEM, OAQ understands the concern, but disagrees with the comments. Allen County officials were notified via mail. When county officials of record receive such information, it is up to them to disseminate it among themselves. In this particular instance, at least one Allen County Council member had knowledge of the process, because he had direct correspondence with the permit writer, and, in fact, attended the public meeting on September 15, 2011 in New Haven, Indiana.

No changes were made to the permit as the result of this comment.

Comment 16:

Several commenters requested that IDEM should increase the inspections of the new facility to several times per year, and publicize the results locally.

Response to Comment 16:

A regular inspection of a source of this size is done once per year, on the average. Source's that have are not in compliance with permit requirements or that are the subject of complaints are inspected more often. Inspection reports are available at IDEM's centralized file room. File room office hours are 8:30 am to 4:30 p.m., Monday through Friday, excluding state holidays. The file room is located at:

Indiana Government Center North, Room 1201
100 North Senate Avenue, MC 50-07
Indianapolis, IN 46204
Phone: (317) 234-0965, Fax (317) 232-8659

IDEM has also created a free "Virtual File Cabinet" (or "VFC") that can be accessed on-line, 24 hours per day. The VFC has more than 9 million pages of IDEM public documents, including inspection reports, with more being added daily. The VFC features a simple, fill-in-the-blanks interface, much like any basic search engine. The VFC can be accessed at http://www.in.gov/idem/4101.htm on the Internet. Most local libraries provide Internet access at little or no cost to the user.

If you have trouble obtaining public documents, contact the Director of the IDEM Central File Room at

(317) 234-0111. For general questions on the requirements of the Access to Public Records Act, contact the state of Indiana's public access counselor at (800) 228-6013 or (317) 233-9435, or visit the Web site: http://www.IN.gov/pac.

Comment 17:

Citizens commented regarding the source determination that was made by IDEM that Superior Aluminum and SDI were separate sources, and that IDEM would re-evaluate if the business plan for SDI changed. How will IDEM monitor the business plan and know when to do the re-evaluation? Also, why weren't other SDI facilities and OmniSource facilities included in the determination?

Response to Comment 17:

If SDI LaFarga changes its business plan in relation to Superior Aluminum it should notify IDEM, OAQ to determine if that will necessitate a change to the air permit for either source. IDEM, OAQ's air inspector is aware of the source issue and will note any circumstances that may require a reexamination of the source determination.

IDEM is not aware of any other plant that should have been included in the source determination. IDEM conducts source determinations when; two or more sources have a common owner or operator and are less than two miles apart, there is a support relationship between two or more sources that have a common owner, there is a significant support relationship between two or more sources, a new source is moving within two miles of an existing source and they have the same owner or operator, a new source is moving into the general area an existing source and will be providing raw material, services or have some other relationship with that source, an on-site contractor disagrees with being included as part of the same source or a source determination issue is raised by the source or any third party.

Comment 18:

Some commenters asked what fines are associated with any violations or noncompliance issues discovered at SDI and where the money from these violations is used.

Response to Comment 18:

Not all violations of environmental laws trigger formal enforcement. One-on-one technical guidance provided by a compliance staff member is often adequate for resolving a problem observed during a records review or inspection. In such a case, a letter is sent noting the violation and measures necessary actions to correct it. IDEM's compliance staff members work appropriately to ensure the responsible party corrects any documented problem.

Although IDEM may seek to enforce alleged violations of Indiana's environmental statutes and rules through a civil court action, the majority of enforcement actions undertaken by IDEM are administrative. The two types of administrative enforcement actions normally issued by IDEM include:

1. an informal Violation Letter (VL); or
2. a formal Notice of Violation (NOV).

The most significant difference between a VL and an NOV is that the VL gives the recipient a timeframe by which it needs to correct a problem, with no attendant civil penalty. If the recipient does not correct the problem within the requisite timeframe, it may receive an NOV, thereby elevating the enforcement action from informal to formal.

An NOV informs a Respondent that IDEM believes violations of environmental statutes and rules have occurred. The Respondent is invited to attend a conference to discuss the violations and solutions for compliance. An NOV normally results in the assessment of civil penalties and the requirement that IDEM and the Respondent sign an Agreed Order (AO). The AO ensures that the Respondent achieves and

maintains compliance with Indiana's environmental statutes and rules.

By statute, the Respondent has a 60-day settlement period after receiving an NOV in which to enter into an AO with IDEM. AOs potentially contain steps the Respondent must take to comply with the law, civil penalties, and stipulated penalties for failure to complete compliance steps. Penalties may be reduced if the Respondent can prove mitigating circumstances exist.

If IDEM and the Respondent cannot reach agreement through an AO, IDEM may issue a unilateral administrative order, referred to as a Commissioner's Order, in accordance with the provisions of Indiana Code § 13-30-3-4. Although state law authorizes fines up to $25,000 per day per violation, most are much less. The amount of the fine depends on the magnitude of the violation, the potential harm to human health and the environment, the economic benefit gained by the violator by not complying, and the violator's efforts to achieve compliance.

Part of the formal enforcement process, whether through an AO or settlement of a CO, involves the assessment of civil penalties. IDEM's civil penalties are assessed in accordance with its Civil Penalty Policy (Nonrule Policy Document ENF-002, which is available at http://www.in.gov/idem/files/nrpd-enf_0002.pdf on IDEM's website. During the negotiation of an AO, IDEM and a Respondent may wish to discuss the availability of a Supplemental Environmental Project (SEP) in accordance with IDEM's Supplemental Environmental Project Policy (Nonrule Policy Document ENF-003 which is available at http://www.in.gov/idem/files/nrpd_enf_003r1.pdf on IDEM's website. A SEP is an environmentally-beneficial project not otherwise required by Indiana law that a Respondent agrees to perform in exchange for a reduction in the cash payment portion of the civil penalty.

Penalties collected are remitted to the state treasurer. Under the Environmental Management Special Fund law, Indiana Code § 13-14-12-1, the IDEM Commissioner may direct the state treasurer to credit all or part of the penalties collected to either the solid waste management fund established under Indiana Code § 13-20-22-2 or the environmental management special fund The money on deposit in the environmental management special fund is used exclusively for the purposes of IDEM and the environmental rule boards. Expenditures for projects authorized by the department or an environmental rule board must be approved by the governor and the state budget agency.

IDEM's enforcement information available through a searchable enforcement database at http://www.in.gov/apps/idem/oe/idem_oe_order on IDEM's website. If you have questions about information in the enforcement database please contact IDEM, via phone, at (317) 232-8603 or (800) 451-6027 (toll free within Indiana), or via email at info@idem.in.gov .

Comment 19:

Citizens have asked if IDEM, OAQ has granted any exemptions to SDI to deviate from any National Ambient Air Quality Standards, and, if so, what violations would cause the exemption to be revoked?

Response to Comment 19:

IDEM has not granted any exemptions to SDI LaFarga from any applicable standard set forth by the U.S EPA or by any applicable state rule or law. The standards, rules, limits, and conditions in the permit are the most stringent allowed by law.

Comment 20:

Many commenters expressed concern about water and soil issues regarding this site, and requested that IDEM, OAQ, perform testing and to check into these items.

Response to Comment 20:

The Office of Air Quality (OAQ) has responsibility for air-related issues only, and has no authority to create permit conditions regarding soil, land, or water-related issues. Any citizen with a complaint about air, land or water pollution may contact IDEM's Complaint Coordinator at (800) 451-6027 ext. 24464. IDEM's Complaint Clearinghouse provides more information regarding filing complaints and is available at IDEM's website at http://www.in.gov/contact/complaints/index.html.

Comment 21:

How much water will SDI purchase from the Fort Wayne City Utilities, or will it have its own wells?

Response to Comment 21:

IDEM, OAQ cannot address issues for which it has no regulatory authority. IDEM, OAQ does not regulate where a source obtains water for its operation.

Additional Changes

Upon further review, IDEM, OAQ has decided to make additional revisions to the permit as described below, with deleted language as ~~strikeouts~~ and new language **bolded**.

(a) The quenching operation and the wax emulsion operation described in the emission unit listing in Section A.2, (g) and (h), describe proposed usage rates that do not need to be listed in this section. The usage rates are not significant and do not affect the permit level, and are already shown in the emissions calculations found in Appendix A of the Technical Support Document. Additionally, the wax emulsion description will be corrected to remove the statement that the process does not contain VOC materials. Section A.2, items (g) and (h), and Section D.1, items (g) and (h), have been changed accordingly.

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2 8 3(c)(3)]

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

(g) One (1) quench/pickling operation, identified as EU-7, approved for construction in 2011, using ~~0.068 gallons of~~ Isopropyl Alcohol (IPA) **added to the** ~~per ton of~~ copper rod;

(h) One (1) Wax Spray operation, identified as EU-8, approved for construction in 2011, using ~~0.0004 gallons of~~ wax **added to the** ~~per ton of~~ copper rod, using no controls. ~~The wax is a water-base product that contains no VOC material;~~

~~--~~

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

(g) One (1) quench/pickling operation, identified as EU-7, approved for construction in 2011, using ~~0.068 gallons of~~ Isopropyl Alcohol (IPA) **added to the** ~~per ton of~~ copper rod;

(h) One (1) Wax Spray operation, identified as EU-8, approved for construction in 2011, using ~~0.0004 gallons of~~ wax **added to the** ~~per ton of~~ copper rod, using no controls. ~~The wax is a water-base product that contains no VOC material;~~

(b) Condition B.3, Affidavit of Construction, will be modified to add the option for the source to submit an equivalent form to IDEM, OAQ. This alternative form will still serve the purpose of certifying that emission units were constructed as proposed. Condition B.3 has been changed accordingly.

B.3 Affidavit of Construction [326 IAC 2 5.1 3(h)] [326 IAC 2 5.1 4][326 IAC 2 8]

This document shall also become the approval to operate pursuant to 326 IAC 2 5.1 4 and 326 IAC 2 8 when prior to the start of operation, the following requirements are met:

(a) The attached Affidavit of Construction**, or its equivalent,** shall be submitted to the Office of Air Quality (OAQ), verifying that the emission units were constructed as proposed in the application or the permit. The emission units covered in this permit may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM if constructed as proposed.

(b) ---

(c) Condition D.1.1(a) describes an annual production limit for the copper rod production process, but also includes unnecessary details in the descriptions in the condition, that have, therefore, been removed. The final paragraph of this condition needed to be changed to more accurately reflect the resulting overall effect of the criteria pollutants. Condition D.1.1 has been changed accordingly.

D.1.1 FESOP Limits [326 IAC 2-8-4] [326 IAC 2-2] [326 IAC 2-4.1]

Pursuant to 326 IAC 2-8-4, the Permittee shall comply with the following:

(a) Production throughput of the copper rod production process~~, including raw material receiving, melting, casting, and finishing, and all associated processes within these process areas,~~ shall not exceed 100,375 tons of copper rod produced per twelve consecutive month period, with compliance determined at the end of each month.

Compliance with these limits, combined with the potential to emit **PM10, PM2.5,** ~~VOC,~~ HCl and HF from all other emission units at this source, shall limit the source-wide total potential to emit of **PM10 and PM2.5** ~~VOC~~ to less than 100 tons per 12 consecutive month period, and HCl and HF to less than ten (10) tons per 12 consecutive month period, each, and total HAPs to less than twenty-five (25) tons per 12 consecutive month period and shall render 326 IAC 2-7 (Part 70 Permits), 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), and 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP) not applicable.

(d) Condition D.1.2(a) is a limit that is redundant to the paragraph also in that condition that states that, compliance with the condition will ensure that the source will remain in compliance with the thresholds established. Condition D.1.2(a) has been removed.

D.1.2 Particulate Matter (PM) [326 IAC 2-2]

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

~~(a) Production throughput of the copper rod production process, including raw material receiving, melting, casting, and finishing, and all associated processes within these process areas, shall not exceed 100,375 tons of copper rod produced per twelve consecutive month period, with compliance determined at the end of each month.~~

~~(b)~~ PM emissions after control from the reverberatory furnace shall be limited to 1.89 pounds per ton of copper rod produced.

Compliance with ~~these~~ **this** limit~~s~~, **in conjunction with Condition D.1.1(a),** combined with the potential to emit PM from all other emission units at this source, shall limit the source-wide total potential to emit of PM to less than 100 tons per 12 consecutive month period and shall render 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

(e) Condition D.1.4(b) has been changed to better clarify the description, and the word “metal” has been changed to “copper”. The last paragraph has also been changed to clarify the effect of the requirements of this comdition.

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

(b) The VOC emissions after control from the reverberatory furnace shall not exceed 1.0 pound of VOC per ton of ~~metal~~ **copper** produced over an entire process operating cycle.

Compliance with this limit, **in conjunction with Condition D.1.1(a),** combined with the potential to emit VOC from other emission units at the source, shall also limit the VOC emissions from the entire source to less than 100 tons per twelve (12) consecutive month period, and render 326 IAC 2-2 and 3626 IAC 2-7 not applicable.

(f) Condition D.1.5 refers to preventive maintenance plan that is required, and references a condition in Section B. However, the Condition should have specifically stated the emission unit for which the condition applied. Condition D.1.5 has been changed to describe that the reverberatory furnace, identified as EU-2, and its control devices, is subject to the preventive maintenance plan requirements.

D.1.5 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A preventive maintenance plan shall be required for the reverberatory furnace, identified as EU-02, and its control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

(g) Condition D.1.6 describes compliance determination requirements and refers to the control devices that are required to operate in order for the source to comply with the conditions in the permit, However, the description should have described the emission unit, rather than the process. Condition D.1.6 has been changed accordingly.

D.1.6 Particulate, VOC, HCl, and HF Control

(a) In order to comply with Conditions D.1.1, D.1.2, and D.1.3, the baghouse BH-1 shall be in operation to control particulate matter at all times that the ~~copper rod production systems are~~ **reverberatory batch furnace is** in operation.

(b) In order to comply with Conditions D.1.1 and D.1.4, the Permittee shall operate the ~~afterburner~~ **thermal oxidizer, RTO-1,** at all times that the **reverberatory batch furnace** ~~process~~ is operating.

(c) In order to comply with Condition D.1.1, the Permittee shall operate the acid

neutralization lime injection system at all times that the **reverberatory batch furnace** ~~process~~ is operating.

(h) Condition D.1.7(d) references an IDEM Non Rule Policy Document requiring testing that should have referenced 326 IAC 2-1.1-11, and to correct references to other conditions. Condition D.1.7(d) has been changed accordingly.

D.1.7 Testing Requirements [326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11]

(b) In order to demonstrate compliance with Condition D.1.1 and to confirm or verify that HCl and HF are less than ten (10) tons per year each, the source shall perform HCl and HF testing **on Stack S-1,** not later than sixty (60) days after achieving maximum capacity, but not later than one hundred and eighty (180) days after initial startup, utilizing methods approved by the Commissioner. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C- Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

(c) **Pursuant to 326 IAC 2-1.1-11 and in** ~~In~~ order to demonstrate compliance with Condition~~s D.1.1 and~~ D.1.4, and to determine the overall control efficiency (capture and destruction efficiencies) of the RTO to control VOC, the Permittee shall perform VOC testing on Stack S-1, serving the reverberatory furnace, within sixty (60) days after achieving maximum capacity, but not later than one hundred and eighty (180) days after initial startup, utilizing methods approved by the Commissioner. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C- Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

(d) Pursuant to ~~Air-014-NPD~~ **326 IAC 2-1.1-11,** and in order to verify compliance with 326 IAC 2-8-4, the Permittee shall perform a one-time stack test on Stack S-1 to verify the NOx, SO2, and CO emission factors from the reverberatory furnace no later than sixty (60) days after achieving maximum capacity, but not later than one hundred eighty (180) days after initial startup utilizing methods as approved by the Commissioner. Section C-Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

(i) Condition D.1.9, in several places, contains an omission of the word “steps”. The phrase “reasonable response” should read “reasonable response steps”. The description has been changed to more accurately reflect the lime injection into the baghouse stream, and that the calibration frequency should have read every 6 months, or other frequency as specified by the manufacturer. Two sentences have been added to clarify what is a permit violation and what is not a violation. Condition D.1.9 has been changed accordingly.

D.1.9 Parametric Monitoring - Baghouse BH-1 **and Lime Injection System**

The Permittee shall perform the following monitoring requirements:

(a) The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the reverberatory furnace operating, at least once per day when the reverberatory furnace is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 1.0 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response **steps**.

Section C- Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

(b) The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months**, or other frequency as specified by the manufacturer**. The Permittee shall maintain records of the manufacturer specifications if used as the basis for less frequent calibration or replacement.

(c) The Permittee shall monitor the lime injection rate at the **acid neutralization lime injection system** ~~baghouse, identified as BH-1~~ at least once per day when the reverberatory furnace is in operation. When for any one reading, the lime injection is not operating correctly, the Permittee shall take reasonable response **steps**. Section C- Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. An observation that the system is not operating correctly is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

(d) The Permittee shall inspect the lime injection system to verify that the lime is free-flowing at least once per day when the reverberatory furnace is in operation. When for any one inspection, the lime is found not to be free-flowing, the Permittee shall take reasonable response **steps**. Section C- Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. **An observation that the lime is not free-flowing is not a deviation from this permit.** Failure to take response steps shall be considered a deviation from this permit.

(j) Condition D.1.10(b) describes actions required in the event of a broken bag on the baghouse. The condition requires an immediate response. However, this is a batch process, and, therefore, an immediate shutdown of operations would be impractical for this process. Therefore, language in Condition D.1.10(b) has been added to modify the response time required in this batch process.

D.1.10 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) ---

(b) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then failed units and the associated process will be shut down ~~immediately~~ **as soon as possible, but, in no case, later than the end of the current batch,** until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

(k) Condition D.1.11 contains temperature requirements for the Regenerative Thermal Oxidizer.

Paragraphs (a) and (c) have been combined for clarity to show that the temperature shall initially be 1300 degrees Fahrenheit until the first stack test, at which time, the stack test result will become the new minimum operating temperature, and to show the intent that the time parameters are a 3-hour block of time. Condition D.1.11 has been changed accordingly.

D.1.11 Regenerative Thermal Oxidizer (RTO-1) Temperature

(a) A continuous monitoring system shall be calibrated, maintained, and operated on the thermal oxidizer system for measuring operating temperature. For the purpose of this condition, continuous means no less than once per fifteen (15) minutes. The output of this system shall be recorded as a three (3)-hour **block** average. From the date of startup until the initial stack test results are available, the Permittee shall operate the thermal oxidizer at or above the three (3)-hour **block** average temperature of 1,300^{o}F. **On and after the date the stack test results are available, the Permittee shall operate the thermal oxidizer at or above the three (3)-hour block average temperature as observed during the compliant stack test. When a temperature is below the temperature established during the latest stack test, the Permittee shall take reasonable response steps. Section C – Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A temperature reading that is below the above-mentioned temperature is not a violation of the permit. Failure to take reasonable response steps shall be considered a deviation of this permit.**

(b) The Permittee shall determine the three (3) -hour **block** average temperature from the most recent valid stack test that demonstrates compliance with limits in the conditions.

~~(c) On and after the date the stack test results are available, the Permittee shall operate the thermal oxidizer at or above the three (3)-hour average temperature as observed during the compliant stack test.~~

(l) Condition D.1.12 contains requirements for the parametric monitoring for the thermal oxidizer system for measuring duct pressure or fan amperage, but the condition should have also included the requirements for reasonable response steps to abnormal readings required by this condition. The condition has also been changed to add two sentences to clarify what is a deviation of the permit and what is not a deviation, and to correct a typographical error in spelling. Condition D.12 has been modified accordingly.

D.1.12 Parametric Monitoring - RTO-1

(a) ---

(b) The duct pressure or fan amperage shall be observed at least once per day when the thermal oxidizer is in operation. On~~e~~ and after the date the stack test results are available, the duct pressure or fan amperage shall be maintained within the normal range is established in the most recent compliant stack test. **When a pressure or amperage is outside the normal ranges listed above or ranges established during the latest stack test, the Permittee shall take reasonable response steps. Section C – Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A duct pressure reading or fan amperage reading outside the normal range is not a deviation from this permit. Failure to take reasonable response steps shall be considered a deviation from this permit.**

(m) Condition D.1.14 has been changed to more accurately reflect that the Permittee may substitute an equivalent report for the standard quarterly report, and to clarify the other conditions affected by this Condition. Condition D.1.14 has been changed accordingly.

D.1.14 Reporting Requirements

(a) A quarterly report**, or its equivalent,** of the production throughput in the copper rod production process as required in Conditions D.1.1, ~~and~~ **D.1.2, and** D.1.4 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, within thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required in this condition. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(n) Condition E.1.2 contains applicable portions of NSPS 40 CFR Part 60, Subpart IIII for the emergency generator. The requirement of 40 CFR 4200(a)(2) has been added to this condition because it describes the applicability of the entire subpart. Subsequent listings have been re-numbered. Item (g) refers to the testing requirements, but it has been determined that there are no testing requirements applicable to this source. Therefore, the subsequent repeat testing required in E.1.3 no longer applies as well. Conditions E.1.2 and E.1.3 have been changed accordingly.

E.1.2 New Source Performance Standards (NSPS), Subpart IIII - Standards of Performance for Stationary Ignition Internal Combustion Engines [40 CFR 60, Subpart IIII]

(a) 40 CFR 60.4200(a)(2)
(~~a~~**b**) 40 CFR 60.4205(b)
(~~b~~**c**) 40 CFR 60.4206
(~~c~~**d**) 40 CFR 60.4207(b)
(~~d~~**e**) 40 CFR 60.4208
(~~e~~**f**) 40 CFR 60.4209**(a)**
(~~f~~**g**) 40 CFR 60.4211(a),(c),(e)
~~(g) 40 CFR 60.4212 (testing requirements)~~
(h) 40 CFR 60.4214(b)
~~(i) 40 CFR 60.4218~~
~~(j) 40 CFR 60.4219~~

This subpart IIII contains no testing requirements applicable to this source.

~~E.1.3 Testing Requirements [326 IAC 2-1.1-11]~~

~~The Permittee shall perform the stack testing as required under NSPS 40 CFR 60, Subpart III, utilizing methods as approved by the Commissioner to document compliance with Condition E.1.2.These tests shall be repeated at least every five (5) years from the date of the last valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.~~

(o) Page 9 of the Technical Support Document (TSD) contained a typographical error regarding the applicability of 40 CFR 63, Subpart FFFFFF. Although the federal rule still is not applicable to the source, the commentary stated that the rule applied to a primary copper smelter, and it should have referenced a secondary copper smelter. The Technical Support Document (TSD) is used by IDEM, OAQ for historical purposes. IDEM, OAQ does not make any changes to the original TSD. This clarification is for reference only, and no changes were made to the permit.

IDEM Contact

(a) Questions regarding this proposed FESOP can be directed to Jack Harmon at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 317-233-4228 or toll free at 1-800-451-6027 extension 3-4228.

(b) A copy of the permit is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/

(c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.idem.in.gov

Indiana Department of Environmental Management
Office of Air Quality

Appendix A to the Addendum Technical Support Document (ATSD)
for SDI LaFarga, LLC

Myron & Cheryl Reed 12728 Edgerton Rd New Haven, IN 46774	Dan Bremer 2824 Webster Rd Monroeville, IN 46773	Ms. Vivian Sade Journal Gazette 300 W. Main St. Fort Wayne, IN 46802
Carol Williams 5828 Monarch Drive Fort Wayne, IN 45815	Laurie A. Johnson 3384 Brantley Drive New Haven, IN 46774	Ann Tzynka 4012 Willow Bay Drive New Haven, IN 46774
Rise Vandenburg 6404 E Canal Point Lane Fort Wayne, IN 46804	Tanya Spangler 20720 Edgerton Road Woodburn, IN 46797	Sam & Renee Spieth 19203 Edgerton Road Woodburn, IN 46797
Ron Hartmann 17331 Far Creek Road New Haven, IN 46774	Pamela S. Berning 9303 Lortie Road Monroeville, IN 46773	Robert & Diana Messman 11025 Lookport Way #105 New Haven, IN 46774
Matthew & Cathlen Werling 14004 Harper Road New Haven, IN 46774	Bill & Jennifer Chapman 2120 Bluecrest Road Woodburn, IN 46797	Jim Holmes 18228 Linocoln Hwy E Monroeville, IN 46773
Ron & Rita Girardot 7337 Bull Rapids Road Woodburn, IN 46797	Ronald A Sarrazine 14621 Rohman Road New Haven, IN 46774	Aaron W Abbott 16829 Edgerton Road New Haven, IN 46774
Christina Gatehill 9634 Ballymore Drive Fort Wayne, IN 46835	Ron & Ladonna Bower 20709 Dawkins Road Woodburn, IN 46797	Tammy & Chris Spieth 18726 Howe Road Monroeville, IN 46773
Pamela Cobb 1416 North Park New Haven, IN 46774	Jerry & Marge Avery 17319 Edgerton Road New Haven, IN 46774	Helene Spieth 18918 Howe Road Monroeville, IN 46773
Barbara Wyss 17635 Edgerton Road New Haven, IN 46774	Robert Humphreys 2124 Cimarron Pass Fort Wayne, IN 46815	James F & Joyce Martin 16913 Edgerton Road New Haven, IN 46774
Ellis McCann 1724 Orkney Lane New Haven, IN 46774	Helen Miller 1606 E MacGregor Drive New Haven, IN 46774	Lynn A Werling 1730 Orkney Lane New Haven, IN 46774
Sharon Kline 1339 Rose Ave New Haven, IN 46774	Lisa Ward 7004 Blackhawk Fort Wayne, IN 46774	Jamie Davis 11933 Monroeville Road Monroeville, IN 46773
Resident 12009 Dawkins Road New Haven, IN 46774 Tom & Sandy Bauermeister 16219 Gar Creek Road	Robert Viggiano 1107 N Berthaud Road New Haven, IN 46774 Deb Zeckzer 4016 Bridgewood Ct	Kirk Kneller 7010 Hartzell Road Fort Wayne, IN 46816 Kevin & Vickie Koenig 13002 US 30 E

New Haven, IN 46774	New Haven, IN 46774	New Haven, IN 46774
Byron LePierre 14512 Dawkins Road New Haven, IN 46774	Dan Melcher 2631 Ryan Road New Haven, IN 46774	Greg Emenhiser 3522 Roussey Road Monroeville, IN 46773
Ira Zelt 19328 Edgerton Road Woodburn, IN 46797	Brenda Schuller 3728 Webster Road Woodburn, IN 46797	Robert & Mary Richart 2930 N Berthaud Road New Haven, IN 46774
Dolores C Lomont 16806 Lincoln Highway E New Haven, IN 46774	Theresa L Coonrod 17515 Edgerton Road New Haven, IN 46774	Darrel Dodane 14915 Lincoldn Highway E New Haven, IN 46774
Roger W & Donnalyn Melcher 2631 Ryan Road New Haven, IN 46774	Connie Linker 2023 N Berthaud Road New Haven, IN 46774	Julie Burkhart 2716 Cooper Hil Run Fort Wayne, IN 46804
Larry Zehr 15030 Dawkins Road New Haven, IN 46774	Bonnie Monhollen 15010 Dawkins Road New Haven, IN 46774	Janie Baker 724 Landin Road New Haven, IN 46774
Charles & Helen Bandelier 12924 Edgerton Road New Haven, IN 46774	Rachel & Kevin Dibble 14916 Dawkins Road New Haven, IN 46774	Gene & Karen Curless 816 S Roussey Road New Haven, IN 46774
Marijane Crowe 3910 Ryan Road New Haven, IN 46774	Michael Henry 3428 S Ryan Road New Haven, IN 46774	Amy Thompson 13305 Paulding Road New Haven, IN 46774
John Heintzerlman 208 Allen St Monroeville, IN 46773	Phil Gerardot 10823 State Road 101 Monroeville, IN 46773	Josh Doutt 3611 Norland Lane New Haven, IN 46774
Mandy Leadock 2604 River Cove Trl Fort Wayne, IN 46825	Mary Ann Case 3815 Eastway Dr Fort Wayne, IN 46806	William Gerardot 8430 Franke Road Fort Wayne, IN 46816
Danielle Crum 1107 N Berthaud Road New Haven, IN 46774	Lowell & Patricia Werling 211 N Berthaud Road New Haven, IN 46774	John Ohneck 4214 Mirada Drive Fort Wayne, IN 46816
Kim Haley 4037 Olieven Cv New Haven, IN 46774	Walter Werling 713 N. Berthaud Road New Haven, IN 46774	Chris Werling 13519 US 24 East New Haven, IN 46774
Greg Asher 133 W Lincoln Hwy #3 New Haven, IN 46774	Adam McHenry 2416 Dellwood Drive Fort Wayne, IN 46803	Bruce Harnish 1210 Hartzell St New Haven, IN 46774
Denny Melcher 12609 Harper Road New Haven, IN 46774	Rod Walker 3078 Naviajo Crossing New Haven, IN 46774	James Cox 2018 Sunnymede Drive Fort Wayne, IN 46803

Cassondra & Doug Geller 1446 Scots Lane New Haven, IN 46774	Lori Fisher 221 Twillo Run Road New Haven, IN 46774	Bob Hunt 7524 Antebellum Blvd Fort Wayne, IN 46815
Brian Rice 419 Henry Street New Haven, IN 46774	Don Markley 15311 Harper Road New Haven, IN 46774	Anita Collins 14622 Harper Road New Haven, IN 46774
Steve Huckeriede 503 N Webster road New Haven, IN 46774	Bertha Ladd 13929 Harper Road New Haven, IN 46774	Jane & Ray Melcher 13119 Harper Road New Haven, IN 46774
Chad Smith 16035 Venison Trl Wodburn, IN 46797	Nicke Goranson 1103 Seward St New Haven, IN 46774	Scott Reinig 14802 Dawkins Road New Haven, IN 46774
Larry Coomer 4424 Lortie Road Monroeville, IN 46773	Bill Rondot 1413 Dundee Drive New Haven, IN 46774	Nick Miller 636 Brandford Ct New Haven, IN 46774
Abigail Frost-King 1901 Niagara Drive Fort Wayne, IN 46805	Tom Meyer 18409 Woodburn Road Woodburn, IN 46797	Fritz Grote 918 Brookdale Drive New Haven, IN 46774
Frederick Laurant 923 Keller Drive New Haven, IN 46774	Stanley Spieth 1635 S Webster Road New Haven, IN 46774	Diane Zehr 1110 Hartzell St New Haven, IN 46774
Rick Alt & Penny ruppert-Alt 41928 Dawkins Road New Haven, IN 46774	Allen County Public Library 17530 State Road 37 Grabill, IN 46741	John and Dawn Cuellar 1617 Orhay Lane New Haven, IN 46774
Abigail King Save Maumee Grassroots Org. 1901 Niagara Drive Fort Wayne, IN 46805	Carl Kelley 6327 Dirwood Ct Fort Wayne, IN 46804	Celia Garza 826 Oak Street New Haven, IN 46774
Dean Robinson 4920 Bahama lane Fort Wayne, IN 46815	Kieth Peters 15730 Rorick Road New Haven, IN 46774	Arlene OKeefe 7920 Wildberry Lane Fort Wayne, IN 46815
Carol & John Bowers 14520 Lincoln Highway E New Haven, IN 46774	Don Tinkham 6021 Minnich Road New Haven, IN 46774	David Sell 15423 Harper Road New Haven, IN 46774
Katherine Goldin PO Box 381 Woodburn, IN 46797	Dan Bremer 2842 Webster Road Monroeville, IN 46773	Marlin & Shirley Culy 16406 Gar Creek Road New Haven, IN 46774
Roy A Buskrik 11015 Coverdale Road Fort Wayne, IN 46809	Lenore Loos 1520 N Park Drive New Haven, IN 46774	

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a New Source Construction and New Source Review and Federally Enforceable State Operating Permit (FESOP)

Source Description and Location

Source Name:	**SDI LaFarga, LLC**
Source Location:	**1640 South Ryan Road, New Haven, Indiana 46774**
County:	**Allen**
SIC Code:	**3341 (Secondary Smelting and Refining of Nonferrous Metals), 3351 (Rolling, Drawing and Extruding of Copper)**
Operation Permit No.:	**F 003-30250-00384**
Permit Reviewer:	**Jack Harmon**

On February 21, 2011, the Office of Air Quality (OAQ) received an application from SDI LaFarga, LLC related to the construction and operation of a new stationary copper rod production facility. Additional information for this permit action was received April 19, May 9, June 2, and June 16, 2011.

Source Definition

This company consists of the following plants:

(a) SDI LaFarga, LLC is located at 1640 South Ryan Road, New Haven, Indiana 46774, Plant ID: 003-00384; and
(b) Superior Aluminum is located at 14214 Edgerton Road, New Haven, Indiana 46774, Plant ID: 003-00286.

In order to consider both plants as one single source, all three of the following criteria must be met:

(1) The plants must have common ownership/control;
(2) The plants must have the same SIC code or one must serve as a support facility of the other; and
(3) The plants must be located on contiguous or adjacent properties.

Superior Aluminum is indirectly owned by SDI, Inc. and, therefore, is under SDI's control. SDI, Inc. also has an indirect majority ownership interest in SDI LaFarga. This majority ownership gives it the power to control SDI LaFarga; therefore, the two plants are under common ownership and common control, and meet the first part of the major source definition.

The Superior Aluminum plant produces aluminum and has a two-digit SIC Code 33 for the Major Group of Primary Metal Industries. The SDI LaFarga plant produces copper but will also be a primary metal producer and will have the same SIC Code of 33. Neither the Superior Aluminum plant nor the SDI LaFarga plant will dedicate any of its output to the other plant. Therefore, neither plant will serve as a support facility to the other. However, since the plants have the same SIC Code, they meet the second part of the major source definition.

The Superior plant and the SDI LaFarga plant will be located on different properties that are completely separated by a third party. The Superior Aluminum plant and the SDI LaFarga plant properties are approximately 1,460 feet apart at their closest point. Since the plants are not contiguous properties, IDEM examined whether the two plants are on adjacent properties. Though the two plants are relatively close together, there will be no materials transferred between the two plants; none of the employees of

Superior will work at the LaFarga plant and none of the SDI LaFarga employees will work at the Superior Aluminum plant. There will be no splitting of the production process between the two plants. Therefore, the plants are not on adjacent properties and, therefore, do not meet the third part of the major source definition.

Since the plants do not meet all three parts of the definition, IDEM, OAQ, finds that they are not part of the same major source, as defined by 326 IAC 2-7-1(22). Therefore, each plant will be permitted separately. IDEM is basing this determination on SDI LaFarga's business plan. If the actual operations differ from the business plan, so that workers or materials are exchanged between the two plants, IDEM reserves the right to revisit this determination.

Existing Approvals

There have been no previous approvals issued to this source.

County Attainment Status

The source is located in Allen County.

Pollutant	Designation
SO_2	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O_3	Attainment effective February 12, 2007, for the Fort Wayne area, including Allen County, for the 8-hour ozone standard.[1]
PM_{10}	Unclassifiable effective November 15, 1990.
NO_2	Cannot be classified or better than national standards.
Pb	Not designated.

[1]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 PM2.5.

(a) Ozone Standards
Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to ozone. Allen County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) $PM_{2.5}$
Allen County has been classified as attainment for $PM_{2.5}$. On May 8, 2008 U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for $PM_{2.5}$ emissions. These rules became effective on July 15, 2008. Indiana has three years from the publication of these rules to revise its PSD rules, 326 IAC 2-2, to include those requirements. The May 8, 2008 rule revisions require IDEM to regulate PM10 emissions as a surrogate for $PM_{2.5}$ emissions until 326 IAC 2-2 is revised.

(c) Other Criteria Pollutants
Allen County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Fugitive Emissions

Since this source is classified as a secondary metal production facility, it is considered one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7. Therefore, fugitive emissions are counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

Background and Description of New Source Construction

The Office of Air Quality (OAQ) has reviewed an application, submitted by SDI LaFarga, LLC on February 21, 2011, relating to the construction and operation of a new stationary copper rod production facility, consisting of melting and purifying copper raw materials, and casting into a continuous copper rod product. The source does not melt copper sulfide ore concentrates. The source has elected to limit its emissions to levels below the major source thresholds; therefore, IDEM will issue a Federally Enforceable State Operating Permit (FESOP). Detailed calculations are shown in Appendix A of this document.

The following is a list of the new emission units and control devices:

(a) One (1) copper scrap receiving and storage facility, identified as EU-1, approved for construction in 2011, with a nominal throughput of 275 tons per day, with raw materials received and stored under cover, but using no controls;

(b) One (1) natural gas-fired reverberatory batch furnace, identified as EU-2, approved for construction in 2011, with a nominal throughput of 275 tons per day, with a combined nominal heat input capacity of 97.2 MMBtu/hr for its burners (55.5 MMBtu/hr) and lances (41.6 MMBtu/hr), with the following controls:

(1) One (1) afterburner, identified as RTO-1, approved for construction in 2011, with a nominal heat input capacity of 15.0 MMBtu/hr for VOC control, exhausting through Stack S-1;

(2) One (1) acid neutralization dry sorbent lime injection system for HCl and HF control, identified as AN-1, approved for construction in 2011, and exhausting through Stack S-1;

(3) One (1) fabric filter baghouse for particulate control, identified as BH-1, approved for construction in 2011, and exhausting to Stack S-1.

(c) Two (2) natural gas-fired launder burners, identified as EU-3, approved for construction in 2011, with a combined nominal heat input capacity of 7.61 MMBtu/hr, using no controls, and exhausting inside the plant;

(d) One (1) natural gas-fired tundish burner, identified as EU-4, approved for construction in 2011, with a nominal heat input capacity of 2.52 MMBtu/hr, using no controls, and exhausting within the plant;

(e) One Copper Rod Casting Machine, identified as EU-5, approved for construction in 2011, with a nominal throughput of 30 tons of copper rod per hour, using no controls;

(f) One (1) acetylene burner, identified as EU-6, approved for construction in 201, with a nominal heat input capacity of 0.065 MMBtu/hr, using no controls, and exhausting within the plant;

(g) One (1) quench/pickling operation, identified as EU-7, approved for construction in 2011, using 0.068 gallons of Isopropyl Alcohol (IPA) per ton of copper rod;

(h) One (1) Wax Spray operation, identified as EU-8, approved for construction in 2011, using 0.0004

gallons of wax per ton of copper rod, using no controls. The wax is a water-base product that contains no VOC material;

(i) One (1) copper slag storage and handling operation, identified as EU-9, approved for construction in 2011, with a nominal throughput of 35 tons per day, with no controls;

(j) Five (5) diesel-fueled emergency backup engines, each with a nominal heat input capacity of 36.9 HP, each with a model year later than 2007, each approved for construction in 2011, each has a displacement of less than 30 liters per cylinder, using no controls, and exhausting within the plant;

Under 40 CFR 60, Subpart IIII, this is considered an affected source.

Under 40 CFR 63, Subpart ZZZZ, this is considered to be an affected source.

(k) Natural gas-fired space heaters, with a combined nominal heat input capacity of 15.0 MMBtu/hr, exhausting inside the plant.

Enforcement Issues

There are no pending enforcement actions related to this source.

Emission Calculations

See Appendix A of this TSD for detailed emission calculations.

Permit Level Determination – FESOP

The following table reflects the unlimited potential to emit (PTE) of the entire source before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	105.85
PM10[(1)]	106.71
PM2.5	106.71
SO_2	25.19
NO_x	69.93
VOC	880.73
CO	40.03
GHG as CO2e	71,702

(1) 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".

HAPs	Potential To Emit (tons/year)
HCl	12.30
HF	12.30
Hexane	1.06
Formaldehyde	0.04
TOTAL HAPs	**25.70**

(a) The potential to emit (PTE) (as defined in 326 IAC 2-7-1(29)) of PM, PM10, PM2.5, and VOC is greater than one hundred (100) tons per year. The PTE of all other regulated criteria pollutants are less than one hundred (100) tons per year. The source would have been subject to the provisions of 326 IAC 2-7. However, the source will be issued a New Source Construction Permit (326 IAC 2-5.1-3) and a Federally Enforceable State Operating Permit (FESOP) (326 IAC 2-8), because the source will limit emissions to less than the Title V major source threshold levels.

(b) The potential to emit (PTE) (as defined in 326 IAC 2-7-1(29)) of any single HAP is greater than ten (10) tons per year and/or the PTE of a combination of HAPs is greater than twenty-five (25) tons per year. Therefore, the source would have been subject to the provisions of 326 IAC 2-7. However, the source will be issued a New Source Construction Permit (326 IAC 2-5.1-3) and) a FESOP (326 IAC 2-8), because the source will limit emissions of HAPs to less than the Title V major source threshold levels.

(c) The potential to emit (PTE) (as defined in 326 IAC 2-7-1(29)) greenhouse gases (GHGs) is less than the Title V subject to regulation threshold of one hundred thousand (100,000) tons of CO_2 equivalent emissions (CO_2e) per year.

PTE of the Entire Source After Issuance of the FESOP

The table below summarizes the potential to emit of the entire source after issuance of this FESOP, reflecting all limits, of the emission units. Any control equipment is considered federally enforceable only after issuance of this FESOP, 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 FESOP (tons/year)								
	PM	PM10, PM2.5*	SO2	NOx	VOC	CO	GHG as CO2e	Total HAPs	Worst Single HAP
Reverberatory Furnace Process , Lances EU-2	86.23**	86.23**	22.81	47.22	45.63***	23.27	51,346.36	19.92	8.67 (HCL)
Afterburner RTO-1 (combustion only)	0.12	0.50	0.04	6.57	0.36	5.52	7,931.98	1.24E-01	1.183E-01 (Hexane)
Launder, Tundish, Burner, Spaceheaters EU-3, EU-4, EU-5	0.20	0.78	0.06	10.31	0.57	8.66	12,370.46	1.95E-01	1.855E-01 (Hexane)
Quenching & Pickling EU-7	0.00	0.00	0.00	0.00	20.35	0.00	0.00	0.00	0.00
Wax Spray and Emulsion EU-8	0.00	0.00	0.00	0.00	0.88	0.00	0.00	0.00	0.00
Emergency Backup Diesel Engines	0.10	0.10	0.09	1.43	0.12	0.31	53.7	1.25E-03	3.81E-04 (Formaldehyde)
Fugitive Emissions									
Scrap Storage Piles EU-1	8.79E-04	4.16E-04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Slag Storage & Handling EU-9	5.45E-03	2.58E-03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paved Roads	1.06E-01	2.07E-02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Fugitives	1.12E-01	2.37E-02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total PTE of Entire Source	86.76	87.63	23.00	65.53	67.91	37.76	71,702.50	20.2	8.67 (HCl)
Title V Major Source Thresholds	NA	100	100	100	100	100	100,000	25	10
PSD Major Source Thresholds	100	100	100	100	100	100	100,000	NA	NA

Process/ Emission Unit	Potential To Emit of the Entire Source After Issuance of FESOP (tons/year)								
	PM	PM10, PM2.5*	SO2	NOx	VOC	CO	GHG as CO2e	Total HAPs	Worst Single HAP
* 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". ** PTE After Control *** Limited PTE									

(a) FESOP Status

This new source is not a Title V major stationary source, because the potential to emit criteria pollutants from the entire source will be limited to less than the Title V major source threshold levels. In addition, this new source is not a major source of HAPs, as defined in 40 CFR 63.41, because the potential to emit HAPs is limited to less than ten (10) tons per year for a single HAP and twenty-five (25) tons per year of total HAPs. Therefore, this source is an area source under Section 112 of the Clean Air Act and is subject to the provisions of 326 IAC 2-8 (FESOP).

In order to comply with the requirements of 326 IAC 2-8-4 (FESOP), the source shall comply with the following:

(1) Production throughput of the copper rod production process shall not exceed 100,375 tons per twelve consecutive month period, with compliance determined at the end of each month;

Note: This production limit is equivalent to the maximum capacity of the plant.

(2) PM10 emissions from the reverberatory furnace shall be limited to 1.89 pounds per ton of copper produced, after control. This unit shall be controlled by a fabric filter baghouse in order to comply.

(3) PM2.5 emissions from the reverberatory furnace shall be limited to 1.89 pounds per ton of copper produced after control. This unit shall be controlled by a fabric filter baghouse in order to comply.

(4) VOC emissions from the reverberatory furnace shall be limited to 1.0 pound per ton of copper produced after control. This unit shall be controlled by a thermal oxidizer afterburner in order to comply.

(5) HCL emissions from the reverberatory furnace shall be limited to 0.21 pounds per ton of copper produced after control. This unit shall be controlled by an acid neutralization lime injection system in order to comply.

(6) HF emissions from the reverberatory furnace shall be limited to 0.21 pounds per ton of copper produced after control. This unit shall be controlled by an acid neutralization lime injection system in order to comply.

Compliance with these limits, combined with the potential to emit VOC, HCl, and HF from all other emission units at this source, shall limit the source-wide total potential to emit of VOC to less than 100 tons per 12 consecutive month period, and HCl and HF to less than ten (10) tons per 12 consecutive month period, each, and total HAPs to less than twenty-five (25) tons per 12 consecutive month period and shall render 326 IAC 2-7 (Part 70 Permits), 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), and 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP) not applicable.

(b) PSD Minor Source

This new source is not a major stationary source, under PSD (326 IAC 2-2), because the

potential to emit PM is greater than 100 tons per year, but the source will limit its emissions to less than 100 tons per year. The potential to emit all other attainment regulated pollutants are less than 100 tons per year, and this source is one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1). Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply. However, the emission factor used to determine the PM PTE is based on a similar operation. Therefore, the source has chosen to limit the PM emissions to less than 100 tons per year, such that 326 IAC 2-2 does not apply.

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable, the source shall comply with the following:

(1) Production throughput of the copper rod production process shall not exceed 100,375 tons per twelve consecutive month period, with compliance determined at the end of each month;

Note: This production limit is equivalent to the maximum capacity of the plant.

(2) PM emissions from the reverberatory furnace shall be limited to 1.89 pounds per ton of copper produced after control. This unit shall be controlled by a fabric filter baghouse in order to comply.

Compliance with these limits, combined with the potential to emit PM from all other emission units at this source, shall limit the source-wide total potential to emit of PM to less than 100 tons per 12 consecutive month period and shall render 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

Federal Rule Applicability Determination

New Source Performance Standards (NSPS)

(a) The five (5) emergency backup diesel engine pumps are subject to the New Source Performance Standards (NSPS) for Stationary Ignition Internal Combustion Engines (40 CFR 60, Subpart IIII), because the units each have a displacement of less than 30 liters per cylinder, and because the model year is later than 2007, and because they are not fire pumps. Therefore, the requirements of 40 CFR 60, Subpart IIII apply. These engines are considered new because are manufactured after April 1, 2006 and will commenced construction after July 11, 2005.

Applicable portions of the NSPS are the following:

(1) 40 CFR 60.4205(b)
(2) 40 CFR 60.4206
(3) 40 CFR 60.4207(b)
(4) 40 CFR 60.4208
(5) 40 CFR 60.4209
(6) 40 CFR 60.4211(a),(c),(e)
(7) 40 CFR 60.4212
(8) 40 CFR 60.4214(b)
(9) 40 CFR 60.4218
(10) 40 CFR 60.4219

The source shall perform the stack testing as required under NSPS 40 CFR 60.4212, Subpart IIII, utilizing methods as approved by the Commissioner to document compliance. These tests shall be repeated at least once every five (5) years from the date of the last valid compliance demonstration.

The requirements of 40 CFR Part 60, Subpart A – General Provisions, which are incorporated as 326 IAC 12-1, apply to the five (5) emergency backup diesel engines except as otherwise specified in 40 CFR 60, Subpart IIII.

(b) This source is not subject to the requirements of New Source Performance Standards for Primary Copper Smelters (40 CFR 60, Subpart P), because it is not a primary copper smelter, as defined in the rule. The facility does not melt copper sulfide ore concentrates. Therefore, the requirements of 40 CFR 60, Subpart P do not apply.

(c) This source is not subject to the requirements of New Source Performance Standards for Metal Coil Surface Coating (40 CFR 60, Subpart TT), because the facility does not produce metal coils and does not perform metal coil surface coating. Therefore, the requirements of 40 CFR 60, Subpart TT do not apply.

(d) There are no other New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the permit.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

(e) This source is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Steel Pickling - HCl Process Facilities and Hydrochloric Acid Regeneration Plants, 40 CFR 63, Subpart CCC, because it is not a major source for HAPs, and because it is not a steel pickling facility, and because it is not a hydrochloric acid regeneration plant. Therefore, the requirements of 40 CFR 63, Subpart CCC do not apply.

(f) The five (5) emergency backup diesel engines are subject to the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (40 CFR 63, Subpart ZZZZ), because the source is an area source for HAPs and becuase the five (5) engiones meet the definition of a Reciprocating Internal Combustion Engine (RICE). These engines are considered new because they will commenced construction after June 12, 2006.

Applicable portions of the NESHAP are the following:

(1) 40 CFR 63.6580
(2) 40 CFR 63.6585
(3) 40 CFR 63.6590
(4) 40 CFR 63.6595
(5) 40 CFR 63.6665
(6) 40 CFR 63.6670
(7) 40 CFR 63.6675

There are no testing requirements for the five emergency generators at this source, since they are less than 500 HP and are located at an area source, as defined under NESHAP 40 CFR 63, Subpart ZZZZ.

The requirements of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the five (5) emergency backup diesel engines except as otherwise specified in 40 CFR 63, Subpart ZZZZ.

(g) This source is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Primary Copper Smelting Area Sources, 40 CFR 63, Subpart EEEEEE, because it is not a major source for HAPs, and because it is not a primary copper smelter, as defined in the rule. The facility does not melt copper sulfide ore concentrates. Therefore, the requirements of 40 CFR 63, Subpart EEEEEE do not apply.

(h) This source is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Secondary Copper Smelting Area Sources, 40 CFR 63, Subpart FFFFFF, because it is not a primary copper smelter, as defined in the rule. The facility uses recycled copper scrap for direct use in a manufacturing process, and, therefore, is not considered a copper smelter. Therefore, the requirements of 40 CFR 63, Subpart FFFFFF do not apply.

(i) This source is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Area Source Paint Stripping and Miscellaneous Surface Coating Operations, 40 CFR 63, Subpart HHHHHH, because the source does not perform paint stripping, or spray application of coatings that contain HAPs, or spray coating of motor vehicles and motor equipment. Therefore, the requirements of 40 CFR 63, Subpart HHHHHH do not apply.

(j) This source is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Secondary Nonferrous Metals Processing Area Sources, 40 CFR 63, Subpart TTTTTT, because the source does not process brass, magnesium, or zinc, and, therefore, is not a secondary metals processing facility. Therefore, the requirements of 40 CFR 63, Subpart TTTTTT do not apply.

(k) This source is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Nine Metal Fabrication and Finishing Source Categories, 40 CFR 63, Subpart XXXXXX, because the source does not engage in any of the nine specific categories listed in the rule, and, therefore, the requirements of 40 CFR 63, Subpart XXXXXX do not apply.

(l) This source is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Area Sources for Aluminum, Copper, and other Nonferrous Foundries, 40 CFR 63, Subpart ZZZZZZ, because it produces copper rods, which is specifically stated as an exemption in the rule. Therefore, the requirements of 40 CFR 63, Subpart ZZZZZZ do not apply.

(m) There are no other National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in the permit.

Compliance Assurance Monitoring (CAM)

(n) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is not included in the permit, because the potential to emit of the source is limited to less than the Title V major source thresholds and the source is not required to obtain a Part 70 or Part 71 permit.

State Rule Applicability Determination

The following state rules are applicable to the source:

(a) 326 IAC 2-8-4 (FESOP)
FESOP applicability is discussed under the PTE of the Entire Source After Issuance of the FESOP section above.

(b) 326 IAC 2-2 (Prevention of Significant Deterioration(PSD))
PSD applicability is discussed under the PTE of the Entire Source After Issuance of the FESOP section above.

(c) 326 IAC 2-3 (Emission Offset)
Emission Offset applicability is discussed under the PTE of the Entire Source After Issuance of the FESOP section above.

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

The unlimited potential to emit of HAPs from the new source is greater than ten (10) tons per year for any single HAP and/or greater than twenty-five (25) tons per year of a combination of HAPs. However, the source shall limit the potential to emit of HAPs from the new source to less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs. Therefore, the source is not subject to the requirements of 326 IAC 2-4.1. See PTE of the Entire Source After Issuance of the FESOP Section above.

(e) 326 IAC 2-6 (Emission Reporting)
Pursuant to 326 IAC 2-6-1, this source is not subject to this rule, because it is not required to have an operating permit under 326 IAC 2-7 (Part 70), it is not located in Lake, Porter, or LaPorte County, and it does not emit lead into the ambient air at levels equal to or greater than 5 tons per year. Therefore, 326 IAC 2-6 does not apply.

(f) 326 IAC 5-1 (Opacity Limitations)
Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(1) 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.

(2) 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.

(g) 326 IAC 6-4 (Fugitive Dust Emissions Limitations)
The source is subject to the requirements of 326 IAC 6-4, because the raw material storage and handling, the slag storage and handling, and the paved roads have the potential to emit fugitive particulate emissions. Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions Limitations), the source 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.

(h) 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)
The source is not subject to the requirements of 326 IAC 6-5, because raw material storage and handling, the slag storage and handling, and the paved roads do not have potential fugitive particulate emissions greater than 25 tons per year. Therefore, the requirements of 326 IAC 6-5 do not apply.

(i) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
The reverberatory furnace is subject to the requirements of 326 IAC 6-3-2 because the process has the potential to emit particulate at a rate greater than 0.551 pounds per hour.

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the reverberatory furnace shall not exceed 21.01 pounds per hour when operating at a process weight rate of 11.46 tons per hour (275 tons/day/24 hours/day). The pound per hour limitation was calculated with the following equation:

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

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

The fabric filter baghouse BH1 shall be in operation at all times the reverberatory furnace is in operation, in order to comply with this limit.

Note: This limit of 19.71 pounds per hour, at a process rate of 10.42 tons of metal per hour, equates to a limit of 1.89 pounds per ton of metal melted after control. This is the basis of the FESOP limit.

(j) 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)

(A) The quenching and pickling operation is not subject to the requiements of 326 IAC 8-1-6 because the unlimited potential to emit VOC is less than 25 tons per year. Therefore, the requirements of 326 IAC 8-1-6 do not apply.

(B) The reverberatory furnace will be constructed after January 1, 1980 and has potential VOC emissions greater than twenty-five (25) tons per year. Therefore, the reverberatory furnace is subject to 326 IAC 8-1-6 and the Permittee is required to control VOC emissions using the Best Available Control Technology (BACT). According to the BACT analysis contained in Appendix B, IDEM, OAQ has determined that the following requirements represent BACT for the reverberatory furnace:

(1) The regenerative thermal oxidizer shall operate at all times when the reverberatory furnace is in operation.

(2) The VOC emissions after control from the reverberatory furnace shall not exceed 1.0 pound of VOC per ton of metal produced over an entire process operating cycle.

Compliance with this limit, in conjunction with the potential to emit VOC of the entire source, shall be less than 100 tons per year, rendering 326 IAC 2-2 and 3626 IAC 2-7 not applicable.

(m) 326 IAC 12 (New Source Performance Standards)
See Federal Rule Applicability Section of this TSD.

(n) 326 IAC 20 (Hazardous Air Pollutants)
See Federal Rule Applicability Section of this TSD.

Compliance Determination, Monitoring and Testing Requirements

(a) The compliance determination and monitoring requirements applicable to this source are as follows:

Emission Unit/Control	Operating Parameters	Frequency
Baghouse BH-1	Pressure Drop; range of 1.0 and 8.0 inches of water	Once per day
Baghouse BH-1	Visible Emissions Notations	Once per day
Afterburner RTO-1	Operating temperature of minimum 1300^{o} until initial stack test; then stack test results determine temperature	Continuous
Afterburner RTO-1	Fan Amperage or Duct Pressure	Once per day
Acid Neutralization Lime Injection System	Material is free-flowing	Once per day

(b) The testing requirements applicable to this source are as follows:

Testing Requirements				
Emission Unit or Stack	**Control Device**	**Pollutant**	**Timeframe for Testing**	**Frequency of Testing**
Stack S-1	Afterburner RTO-1	VOC	180 days after start-up	Every 5 years
Stack S-1	Baghouse BH-1	PM, PM10, PM2.5	180 days after start-up	Every 5 years
Stack S-1	Baghouse BH-1	NOx, SO2, CO	180 days after start-up to verify emission factors	One time only
Stack S-1	Acid Neutralization Lime injection system	HCl and HF	180 days after start-up to verify emission factors	Every 5 years

Conclusion and Recommendation

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 21, 2011. Additional information was received on April 19, May 9, June 2, and June 16, 2011.

The construction and operation of this source shall be subject to the conditions of the attached proposed New Source Construction and New Source Review and FESOP No. 003-30250-00384. The staff recommends to the Commissioner that this New Source Construction and New Source Review and FESOP be approved.

IDEM Contact

(a) Questions regarding this proposed permit can be directed to Jack Harmon at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 233-4228 or toll free at 1-800-451-6027 extension 3-4228.

(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.in.gov/idem

Appendix A: Emissions Calculations
Uncontrolled Emissions - Entire Source

Company Name: SDI LaFarga, LLC
Address City IN Zip: 1640 South Ryan Road, New Haven, Indiana 46774
Permit Number: 003-30250-00384
Plt ID: 003-00384
Reviewer: Jack Harmon
Date: 2011

Uncontrolled and Unlimited Emissions

Emission Unit	PM	PM10	PM2.5	SO2	NOx	VOC	CO	GHGs as CO2e	Worst HAP	Total HAPs
Reverberatory Furnace Process, Lances, EU-2	105.39	105.39	105.39	25.09	51.94	856.5	25.6	51,346.36	(HCl) 1.23E+01	2.54E+01
Afterburner RTO-1	0.12	0.50	0.50	0.04	6.57	0.36	5.52	7,931.98	1.183E-01 (Hexane)	1.24E-01
Launder, Tundish, Burner, Spaceheaters EU-3, EU-4, EU-5	0.20	0.78	0.78	0.06	10.31	0.57	8.66	12,370.46	1.855E-01 (Hexane)	1.95E-01
Quenching & Pickling EU-7	0.00	0.00	0.00	0.00	0.00	22.39	0.00	0.00	0.00	0.00
Wax Spray and Emulsion EU-8	0.00	0.00	0.00	0.00	0.00	0.88	0.00	0.00	0.00	0.00
Emergency Backup Diesel Engines	0.03	0.02	0.02	0	1.11	0.03	0.25	53.7	3.81E-04 (Formaldehyde)	1.25 E-03
Fugitive Emissions										
Scrap Storage Pile EU-1	8.79E-04	4.16E-04	4.16E-04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Slag Storage & Handling EU-9	5.45E-03	2.58E-03	2.58E-03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paved Roads	1.06E-01	2.07E-02	2.07E-02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Fugitives	1.12E-01	2.37E-02	2.37E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Total Potential to Emit	**105.85**	**106.71**	**106.71**	**25.19**	**69.93**	**880.73**	**40.03**	**71702.50**	**1.23E+01**	**2.57E+01**

Limited Emissions**

Emission Unit	PM	PM10	PM2.5	SO2	NOx	VOC	CO	GHGs as CO2e	Worst HAP	Total HAPs
Reverberatory Furnace Process, Lances, EU-2	86.23	86.23	86.23	22.81	47.22	45.63	23.27	51,346.36	(HCl) 8.67	19.92
Afterburner RTO-1	0.12	0.50	0.50	0.04	6.57	0.36	5.52	7,931.98	1.183E-01 (Hexane)	1.24E-01
Launder, Tundish, Burner, Spaceheaters EU-3, EU-4, EU-5	0.20	0.78	0.78	0.06	10.31	0.57	8.66	12,370.46	1.855E-01 (Hexane)	1.95E-01
Quenching & Pickling EU-7	0.00	0.00	0.00	0.00	0.00	20.35	0.00	0.00	0.00	0.00
Wax Spray and Emulsion EU-8	0.00	0.00	0.00	0.00	0.00	0.88	0.00	0.00	0.00	0.00
Emergency Backup Diesel Engines	0.10	0.10	0.10	0.09	1.43	0.12	0.31	53.7	3.81E-04 (Formaldehyde)	1.25 E-03
Fugitive Emissions										
Scrap Storage Pile EU-1	8.79E-04	4.16E-04	4.16E-04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Slag Storage & Handling EU-9	5.45E-03	2.58E-03	2.58E-03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paved Roads	1.06E-01	2.07E-02	2.07E-02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Fugitives	1.12E-01	2.37E-02	2.37E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Total Potential to Emit	**86.76**	**87.63**	**87.63**	**23.00**	**65.53**	**67.91**	**37.76**	**71,702.50**	**8.67E+00**	**2.02E+01**
									(HCl)	

**Source has elected to limit PM, PM10, and PM2.5 emissions for reverberatory furnace, controlled by a fabric filter baghouse, to 1.89 lb/ton produced.
**Source has elected to limit VOC emissions for reverberatory furnace, controlled by thermal oxidizer afterburner, to 1.00 lb/ton produced.
**Source has elected to limit HCl and HF emissions for reverberatory furnace, controlled by acid neutralization process, to 0.19 lb/ton produced each.

Appendix A: Emissions Calculations
EU-2 Reverberatory Furnace

Company Name: SDI LaFarga, LLC
Address City IN Zip: 1640 South Ryan Road, New Haven, Indiana 46774
Permit Number: 003-30250-00384
Plt ID: 003-00384
Reviewer: Jack Harmon
Date: 2011

Unit	MMBtu/hr
Reverb Burners	55.50
2 Lances	41.60
Total	97.10

Heat Input Capacity MMBtu/hr	HHV mmBtu / mmscf	Potential Throughput MMCF/yr	Potential Throughput (tons/yr)
97.10	1000	850.6	100375.0

	Pollutant					
	PM	PM10	SO2	NOx	VOC	CO
Emission Factor in lb/ton of throughput of the process.	2.10	2.10	0.50	1.04	17.07	0.51
Potential Emission in tons/yr	105.39	105.39	25.09	51.94	856.50	25.60

Methodology
- Emission factors derived from stack tests conducted at sister facility , LaFarga, Inc. on March 22, 2010, with similar processes and equipment. Use approved by Compliance Data Section, but will require testing within 180 days of startup to verify these factors.
- Emissions for PM, PM10, SO2, Nox, VOC, and CO are based on production throughput, since the emission factors were calculated on lb per ton of throughput.
- Emission (tons/yr) = Throughput (tons/yr) x Emission Factor (lb/ton)/2,000 lb/ton

Appendix A: Emissions Calculations
EU-2 Reverberatory Furnace

HAPs Emissions
Company Name: **SDI LaFarga, LLC**
Address City IN Zip: **1640 South Ryan Road, New Haven, Indiana 46774**
Permit Number: **003-30250-00384**
Plt ID: **003-00384**
Reviewer: **Jack Harmon**
Date: **2011**

	HAPs - Organics							
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene	HCL	HF	Total Organics
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03	2.45E-01	2.45E-01	
Potential Emission in tons/yr	8.931E-04	5.104E-04	3.190E-02	7.655E-01	1.446E-03	**1.23E+01**	**1.23E+01**	2.539E+01

	HAPs - Metals					
	Lead	Cadmium	Chromium	Manganese	Nickel	Total Metals
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03	
Potential Emission in tons/yr	2.126E-04	4.678E-04	5.954E-04	1.616E-04	8.931E-04	2.331E-03

Methodology

Total HAPs **2.539E+01**

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas
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/1,000 MMBtu
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

MM BTU/HR <100

Greenhouse Gas Emissions

Company Name: **SDI LaFarga, LLC**
Address City IN Zip: **1640 South Ryan Road, New Haven, Indiana 46774**
Permit Number: **003-30250-00384**
Plt ID: **003-00384**
Reviewer: **Jack Harmon**
Date: **2011**

	Greenhouse Gas		
	CO2	CH4	N2O
Emission Factor in lb/MMcf	120000	2.3	2.2
Potential Emission in tons/yr	51035.76	0.9781854	0.9356556
Summed Potential Emissions in tons/yr	51,037.67		
CO2e Total in tons/yr	51,346.36		

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.
Greenhouse 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

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

Company Name: SDI LaFarga, LLC
Address City IN Zip: 1640 South Ryan Road, New Haven, Indiana 46774
Permit Number: 003-30250-00384
Plt ID: 003-00384
Reviewer: Jack Harmon
Date: 2011

Afterburner RTO-1

Heat Input Capacity MMBtu/hr	HHV mmBtu / mmscf	Potential Throughput MMCF/yr
15.0	1000	131.4

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	0.12	0.50	0.04	6.57	0.36	5.52

*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 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/1,000 MMBtu
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

See page 2 for HAPs emissions calculations.

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

Company Name: SDI LaFarga, LLC
Address City IN Zip: 1640 South Ryan Road, New Haven, Indiana 46774
Permit Number: 003-30250-00384
Plt ID: 003-00384
Reviewer: Jack Harmon
Date: 2011

	HAPs - Organics					
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene	Total Organics
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03	
Potential Emission in tons/yr	1.380E-04	7.884E-05	4.928E-03	**1.183E-01**	2.234E-04	1.236E-01

	HAPs - Metals					
	Lead	Cadmium	Chromium	Manganese	Nickel	Total Metals
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03	
Potential Emission in tons/yr	3.285E-05	7.227E-05	9.198E-05	2.497E-05	1.380E-04	3.600E-04

Methodology is the same as page 1.

Total HAPs **1.240E-01**

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

MM BTU/HR <100
Greenhouse Gas Emissions
Company Name: SDI LaFarga, LLC
Address City IN Zip: 1640 South Ryan Road, New Haven, Indiana 46774
Permit Number: 003-30250-00384
Plt ID: 003-00384
Reviewer: Jack Harmon
Date: 2011

	Greenhouse Gas		
	CO2	CH4	N2O
Emission Factor in lb/MMcf	120000	2.3	2.2
Potential Emission in tons/yr	7884	0.15111	0.14454
Summed Potential Emissions in tons/yr	7884.29565		
CO2e Total in tons/yr	7931.98071		

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.
Greenhouse 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

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

Company Name: SDI LaFarga, LLC
Address City IN Zip: 1640 South Ryan Road, New Haven, Indiana 46774
Permit Number: 003-30250-00384
Plt ID: 003-00384
Reviewer: Jack Harmon
Date: 2011

Unit	MMBtu/hr
Launder EU-3	5.95
Tundish EU-4	2.52
Burner EU-6	0.065
Spaceheaters	15.00
Total	23.54

Heat Input Capacity MMBtu/hr	HHV mmBtu/mmscf	Potential Throughput MMCF/yr
23.54	1000	206.2

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	0.20	0.78	0.06	10.31	0.57	8.66

*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 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/1,000 MMBtu
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

See page 2 for HAPs emissions calculations.

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

Company Name: SDI LaFarga, LLC
Address City IN Zip: 1640 South Ryan Road, New Haven, Indiana 46774
Permit Number: 003-30250-00384
Plt ID: 003-00384
Reviewer: Jack Harmon
Date: 2011

	HAPs - Organics					
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene	Total Organic
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03	
Potential Emission in tons/yr	2.165E-04	1.237E-04	7.731E-03	**1.855E-01**	3.505E-04	1.940E-01

	HAPs - Metals					
	Lead	Cadmium	Chromium	Manganese	Nickel	Total Metals
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03	
Potential Emission in tons/yr	5.154E-05	1.134E-04	1.443E-04	3.917E-05	2.165E-04	5.649E-04

Methodology is the same as page 1.

Total HAPs **1.945E-01**

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

MM BTU/HR <100

Greenhouse Gas Emissions

Company Name: SDI LaFarga, LLC
Address City IN Zip: 1640 South Ryan Road, New Haven, Indiana 46774
Permit Number: 003-30250-00384
Plt ID: 003-00384
Reviewer: Jack Harmon
Date: 2011

	Greenhouse Gas		
	CO2	CH4	N2O
Emission Factor in lb/MMcf	120000	2.3	2.2
Potential Emission in tons/yr	12369.996	0.23709159	0.22678326
Summed Potential Emissions in tons/yr	12370.46		
CO2e Total in tons/yr	12445.28		

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.
Greenhouse 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

updated 12/10

Appendix A: Emissions Calculations
Quenching and Pickling
EU-7

Company Name: **SDI LaFarga, LLC**
Address City IN Zip: **1640 South Ryan Road, New Haven, Indiana 46774**
Permit Number: **003-30250-00384**
Plt ID: **003-00384**
Reviewer: **Jack Harmon**
Date: **2011**

Quenching and Pickling Operation EU-7

Material	lbs VOC per gallon	Tons of Copper Rod per yr	Usage per ton of Rod (gallons)	Gallons IPA/yr	VOC lb/yr	VOC tons/yr
Isopropanol Alcohol	6.56	100375	0.068	6825.5	44775.28	22.39
					Total VOC emissions	**22.39**

Methodology
VOC content obtained form MSDS sheets
Usage of IPA per ton of copper rod obtained from source.
Gallons IPA/yr = tons of rod produced per year x usage of IPA per ton of copper rod (gallons/ton)
VOC lb/yr = gallons / yr x VOC lb/gal
VOC tons/yr = VOC lb/yr / 2000 lb/ton

Appendix A: Emissions Calculations
Wax and Emulsion
EU-8
Company Name: SDI LaFarga, LLC
Address City IN Zip: 1640 South Ryan Road, New Haven, Indiana 46774
Permit Number: 003-30250-00384
Plt ID: 003-00384
Reviewer: Jack Harmon
Date: 2011

Rolling Emulsion and Wax Application

Material	lbs VOC per gallon	Usage per year (gallons)	VOC lb/yr	VOC tons/yr
Rolling emulsion	0.876	1967.7	1723.7	0.86
Wax application	0.85	41.0	34.9	0.02
				0.88

Methodology
VOC content obtained form MSDS sheets
Usage of materials obtained from source, using mass balance.
VOC lb/yr = gallons / yr x VOC lb/gal
VOC tons/yr = VOC lb/yr / 2000 lb/ton

Appendix A: Emission Calculations
Reciprocating Internal Combustion Engines - Diesel Fuel
Output Rating (<=600 HP)

Company Name: **SDI LaFarga, LLC**
Address City IN Zip: **1640 South Ryan Road, New Haven, Indiana 46774**
Permit Number: **003-30250-00384**
Plt ID: **003-00384**
Reviewer: **Jack Harmon**
Date: **2011**

B. Emissions calculated based on output rating (hp)

5 emergency generators, each rated at 36.9 HP = 184.5 combined HP.

Output Horsepower Rating (hp)	184.5
Maximum Hours Operated per Year	500
Potential Throughput (hp-hr/yr)	92,250

	Pollutant						
	PM*	PM10*	PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/hp-hr	7.00E-04	4.01E-04	4.01E-04	0.00E+00 *(.00809S)*	2.40E-02 **see below	7.05E-04	5.50E-03
Potential Emission in tons/yr	0.03	0.02	0.02	0.00	1.11	0.03	0.25

*PM10 emission factor in lb/hp-hr was calculated using the emission factor in lb/MMBtu and a brake specific fuel consumption of 7,000 Btu / hp-hr (AP-42 Table 3.3-1).
**NOx emission factor: uncontrolled = 0.024 lb/hp-hr, controlled by ignition timing retard = 0.013 lb/hp-hr

Hazardous Air Pollutants (HAPs)

	Pollutant							
	Benzene	Toluene	Xylene	Formaldehyde	Acetaldehyde	Acrolein	Total PAH HAPs***	
Emission Factor in lb/hp-hr****	5.43E-06	1.97E-06	1.35E-06	5.52E-07	1.76E-07	5.52E-08	1.48E-06	
Potential Emission in tons/yr	2.51E-04	9.07E-05	6.23E-05	2.55E-05	8.14E-06	2.54E-06	6.84E-05	**2.94E-07**

Total PAH HAPs***
1.18E-06
2.94E-07

***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).

Potential Emission of Total HAPs (tons/yr)	**5.08E-04**

Green House Gas Emissions (GHG)

	Pollutant		
	CO2	CH4	N2O
Emission Factor in lb/hp-hr	1.16E+00	6.35E-05	9.30E-06
Potential Emission in tons/yr	5.35E+01	2.93E-03	4.29E-04

Summed Potential Emissions in tons/yr	**5.35E+01**
CO2e Total in tons/yr	**5.37E+01**

icdsl250.xls 9/95
updated 4/2009

Methodology
Emission Factors are from AP 42 (Supplement B 10/96) Tables 3.4-1 , 3.4-2, 3.4-3, and 3.4-4.
N2O Emission Factor from 40 CFR 98 Subpart C Table C-2.
Greenhouse 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) +

icdsl600.xls 9/95
updated 6/2011

Appendix A: Emissions Calculations
Particulate Matter from Fugitive Sources

Company Name: SDI LaFarga, LLC
Address City IN Zip: 1640 South Ryan Road, New Haven, Indiana 46774
Permit #: 003-30250-00384
Reviewer: Jack Harmon
Date: 2011

Slag Dumping

E = k(0.0032) * (U/5)^1.3 / (M/2)^1.4 AP-42 Chapter 13.2.4, Equation 1

E =	Emission Factor (lbs/ton)		
k =	0.35	particle size multilplier for PM-10	
	0.74	particle size multilplier for PM	
U =	10	mean wind speed (mph)	
M =	7.4	material moisture content (fraction)	Moisture content is from AP-42 13.2.4-1 for sand

PM Emission Factor:
E = 0.00093377 lb/ton

PM-10 Emission Factor:
E = (0.35)(0.0032) * (12.7/5)^1.3 / (10%/2)^1.4
E = 0.00044165 lb/ton

Annual potential amount of dry material = 11,680 tpy Slag is the only material dumped on site.

Potential PM Emissions (tons/year) = Emission factor (lb/ton) * Slag dumped (tpy) / 2000 (lbs/ton)
Potential PM Emissions (tons/year) = **5.45E-03 tpy**

Potential PM-10 Emissions (tons/year) = Emission factor (lb/ton) * Slag dumped (tpy) / 2000 (lbs/ton)
Potential PM-10 Emissions (tons/year) = **2.58E-03 tpy**

Paved Roads

Maximum Vehicular Speed: 10 mph
Average Distance of Haul: 0.25 miles

Vehicle Type	No. of One Way Trips per Day	Weight
Truck	14	40
total	14	

Weighted Average Gross Weight: 40 tons 200,000 tons hauled per year
40 tons/truck load
Calculations: 5000 Trucks loads
E = k(sL/2)^0.65 * (W/3)^1.5 AP-42 Chapter 13.2.1, Equation 1 13.69863 loads per day

E =	Emission factor (lbs/vehicle miles traveled(VMT))		
k =	0.016	particle size multiplier for PM-10	
	0.082	particle size multiplier for PM	
sL	0.015	road surface silt content (g/m^2)	Value provided by AP-42 Ch. 13 for limited access roads
W	40	weighted average vehicle weight (tons)	**(calculate from table above)**

source: AP-42, chapter 13.2.1, p. 13.2.1-6.

VMT= 1277.5 (miles/yr)

PM
E = 0.16596319 lbs/VMT

Potential PM Emissions (ton/yr) = Emission factor (lbs/VMT) * VMT / 2000 (lbs/ton)
Potential PM Emissions (ton/yr) = **1.06E-01 tpy**

PM-10
E = 0.03238306 lbs/VMT

Potential PM-10 Emissions (ton/yr) = Emission factor (lbs/VMT) * VMT / 2000 (lbs/ton)
Potential PM-10 Emissions (ton/yr) = **2.07E-02 tpy**

Storage Piles

The section that discusses storage piles, AP-42 Section 13.2.4, indicates that the largest contriubution to emissions from the storage pile is the loading into the pile.

Potential PM Emissions (tons/year) = **8.65E-04 tpy**
Potential PM-10 Emissions (tons/year) = **4.09E-04 tpy**

Storage Pile Handling

EF (lb/ton) = k * (0.0032) * (U/5)^1.3 / (M/2)^1.4

where:

k value for:

PM	PM10
0.74	0.35

U value =	10	mph	
M value =	7.4	%	Moisture content is from AP-42 13.2.4-1 for sand
Storage capacity =	60	tons	
PM EF =	9.34E-04	lb/ton	
PM10 EF =	4.42E-04	lb/ton	

PM Emissions (ton/yr) = EF (lb/ton) * Storage Capacity (tons) * use rate (1/year) * 1/2000 ton/lb
PM Emissions (ton/yr) = **1.40E-05**

PM10 Emissions (ton/yr) = EF (lb/ton) * Storage Capacity (tons) * use rate (1/year) * 1/2000 ton/lb
PM10 Emissions (ton/yr) = **6.62E-06**

Total Storage piles and handling	
PM	**8.79E-04**
PM10	**4.16E-04**

Indiana Department of Environmental Management
Office of Air Quality

Appendix B
Best Available Control Technology (BACT) Determination

Source Description and Location

Source Name:	**SDI LaFarga, LLC**
Source Location:	**1640 South Ryan Road, New Haven, Indiana 46774**
County:	**Allen**
SIC Code:	**3341**
Operation Permit No.:	**003-30250-00384**
Permit Reviewer:	**Brian Williams**

Introduction

The Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) has performed the following Best Available Control Technology (BACT) review for construction and operation of a new copper rod production facility.

Description of Process and Potential Emissions

SDI LaFarga, LLC is proposing to install a 97.3 MMBtu per hour natural gas-fired reverberatory furnace (EU-2) to melt scrap copper. The furnace will have the capacity to process 275 tons of copper per day. VOC emissions result from the combustion of natural gas and from organic materials in the scrap material being melted. Therefore, the source has proposed to control VOC emissions with a natural gas-fired thermal oxidizer.

Pursuant to 326 IAC 8-1-6 (New Facilities; General Reduction Requirements), BACT is required for all facilities constructed after January 1, 1980 that have potential VOC emissions of equal to or greater than twenty-five (25) tons per year and are not regulated by other rules in 326 IAC 8. Based on the calculations (see TSD Appendix A) and the analysis of applicable state regulations (see State Rule Applicability section of TSD), the reverberatory furnace (EU-2) is subject to the requirements of 326 IAC 8-1-6, since it has potential VOC emissions of greater than twenty-five (25) tons per year and is not regulated by other rules in 326 IAC 8. Therefore, the Permittee is required to control VOC emissions from the reverberatory furnace (EU-2) pursuant to the provisions of 326 IAC 8-1-6 (BACT).

BACT Description

IDEM, OAQ conducts BACT analyses in accordance with the *"Top-Down" Best Available Control Technology* process, which outlines the steps for conducting a top-down BACT analysis. Those steps are listed below:

(1) Identify all potentially available control options;
(2) Eliminate technically infeasible control options;
(3) Rank remaining control technologies by control effectiveness;
(4) Evaluate the most effective controls and document the results as necessary; and
(5) Select BACT.

In accordance with EPA guidance, the BACT analysis should take into account the energy, environmental, and economic impacts. Emission reductions may be achieved through the application of available control techniques, changes in process design, and/or operational limitations.

A summary of the BACT review for the reverberatory furnace is provided below. This BACT determination is based on the following information:

(1) The BACT analysis information submitted by Bio-Alternative, LLC on October 19, 2010;
(2) The EPA RACT/BACT/LAER (RBLC) Clearinghouse; and
(3) State and local air quality permits.

VOC BACT Analysis

Step 1 − Identify All Potentially Available Control Options

Based on the information reviewed for this BACT determination, the following potentially available control technologies were identified for controlling VOC emissions from the reverberatory furnace (EU-2):

(1) Regenerative Thermal Oxidizer:

Thermal oxidation is the process of oxidizing organic contaminants in a waste gas stream by raising the temperature above the auto ignition point in the presence of oxygen for sufficient time to completely oxidize the organic contaminants to carbon dioxide and water. The residence time, temperature, flow velocity and mixing, and the oxygen concentration in the combustion chamber affect the oxidation rate and destruction efficiency. Thermal oxidizers typically require combustion of an auxiliary fuel (e.g., natural gas) to maintain combustion chamber temperature high enough to completely oxidize the contaminant gases. Thermal oxidizers are typically designed to have a residence time of one second or less and combustion chamber temperatures between 1,200 and 2,000°F.

A regenerative thermal oxidizer uses a high-density media such as a packed ceramic bed, which was heated in a previous cycle, to preheat the incoming waste gas stream, resulting in improved oxidizer efficiency and significant fuel cost savings. In general, thermal oxidizers are less efficient at treating waste gas streams with highly variable flowrates, since the variable flowrate results in varying residence times, combustion chamber temperature, and poor mixing. Based on information provide by the Environmental Protection Agency (EPA), thermal oxidizer are able to achieve VOC destruction efficiencies from 95% to 98% for VOC laden waste streams under certain operating conditions.

(2) Catalytic Incinerator:
In a catalytic incinerator, a catalyst is used to lower the activation energy for oxidation. When a preheated gas stream is passed through a catalytic oxidizer, the catalyst bed initiates and promotes the oxidation of VOCs without being permanently altered itself. In catalytic incineration, combustion occurs at significantly lower temperatures than that of direct flame units and can achieve a destruction efficiency of 95%. However, steps must be taken to ensure complete combustion. Common types of catalysts used include platinum, platinum alloys, copper chromate, copper oxide, chromium, manganese, and nickel. These catalysts are typically deposited in thin layers on an inert substrate, usually a honeycomb shaped ceramic. Catalytic incineration are not suited to systems with high exhaust volumes, variable types and concentrations of VOC, and where catalyst poisons or fouling contaminants are present.

(3) Carbon Adsorption:
Carbon adsorption is a process, by which VOC is retained on a granular carbon surface, which is highly porous and has a very large surface-to-volume ratio. Adsorption is rapid and removes most of the VOC in the stream. Eventually, the adsorbent becomes saturated with the vapors and the system's efficiency drops. The adsorbent must be regenerated or replaced soon after efficiency begins to decline. In regenerative systems, the adsorbent is reactivated with steam or hot air and the absorbate (solvent) is recovered for reuse or disposal. Non-regenerative systems

require the removal of the adsorbent and replacement with fresh or previously regenerated carbon.

Step 2 − Eliminate Technically Infeasible Control Options

Based on the information reviewed for this BACT determination, IDEM, OAQ has determined that the use of a catalytic incinerator and carbon adsorption unit are not technically feasible options for this source for the following reasons:

(1) The use of a catalytic oxidizer would be infeasible, because the extremely high temperatures from the furnace are in excess of 900°C during portions of the batch melting cycle. This exceeds the recommended operating range for catalytic oxidation and raises concern that there will be a potential for fires to develop in the catalyst bed. In addition, the hot gases in the exhaust stream may also contain various organic or metallic compounds, which can potentially foul the catalyst bed.

(2) The use of a carbon adsorption unit would be infeasible due to the high air temperatures and the hot gases in the exhaust stream may contain various organic or metallic compounds, which can potentially foul the carbon adsorption media.

Step 3 – Rank Remaining Control Technologies by Control Effectiveness

IDEM, OAQ has ranked the technically feasible control technologies and combinations of control technologies as follows:

Control Technology	Control Efficiency (%)
Regenerative Thermal Oxidizer	95% to 98%

IDEM, OAQ is aware that the above-mentioned control technologies may periodically achieve control efficiencies that exceed the listed values under certain operating conditions. However, one factor to consider when evaluating BACT is that the BACT limit must be achievable on a consistent basis under normal operational conditions. BACT limitations should not necessarily reflect the highest possible control efficiency achievable by the technology on which the emission limitation is based. The permitting authority has the discretion to base the emission limitation on a control efficiency that can be lower than the optimal level. There are several reasons why the permitting authority might choose to do this. One reason is that the control efficiency achievable using the technology may fluctuate, so that it would not always achieve its optimal control efficiency. In that case, setting the emission limitation to reflect the highest control efficiency would make violations of the permit unavoidable. To account for this possibility, a permitting authority must be allowed a certain degree of discretion to set the emission limitation at a level that does not necessarily reflect the highest possible control efficiency, but will allow the Permittee to achieve compliance consistently. While IDEM, OAQ recognizes that a greater control efficiency may be achievable as an average during compliance testing, IDEM, OAQ allows sources to include a safety factor, or margin of error, to allow for minor variations in the operation of the emission units and the control device.

Step 4 – Evaluate the Most Effective Controls and Document Results

A search of EPA's RACT/BACT/LAER Clearinghouse (RBLC) and Indiana Air Permits identified no permits issued to date that required the use of a control device for VOC emissions from reverberatory furnaces. As a result, the review was expanded to include any natural gas-fired furnaces located at sources that operate under the Major Group 33: Primary Metal Industries, SIC Code, regardless of the material being melted. The RBLC and Indiana Air Permits database did not identify any sources that were required to use an add-on-control for VOC emissions. In addition, mass limits are specified in different formats, such that comparison is difficult to be made.

SDI LaFarga, LLC has proposed to use a regenerative thermal oxidizer to control the VOC emissions from the reverberatory furnace (see table below). In addition to the add control device, a mass limit of 1.0 pound of VOC per ton of metal melted over an entire process operating cycle has been proposed as BACT. This limit is based on a stack test for a similar facility owned by LaFarga in Spain.

Plant	RBLC ID or Permit #	Date Issued and State	Facility	BACT Determination
SDI LaFarga, LLC	*003-30250-00384*	*Pending IN*	*Reverberatory Furnace for copper*	*Regenerative Thermal Oxidizer VOC emissions = 1.0 pound of VOC per ton of metal melted over an entire process operating cycle (BACT-State)*
Brush Wellman, Inc.	OH-0322	04/15/2008 OH	Whiting Electric Arc Furnace for copper	No Control VOC emissions < 0.61 lb/hr (BACT - PSD)
Steel Dynamics, Inc. (SDI) - Engineered Bar Products Division	063-16628-00037	08/29/2003 IN	Reheat Furnace for steel	No Control VOC emissions < 0.0055 lb/MMBtu (BACT - PSD)
Nucor Steel	107-18314-00038	05/27/2004 IN	Vacuum Degasser Boiler for steel	No Control VOC emissions < 0.0026 lb/MMBtu (BACT - PSD)
ALCOA Engineered Products	PA-0245	11/13/2003 PA	Aluminum Melters (#8 & #9) for aluminum	No Control VOC emissions < 5.50 lb/MMCF
TPCO America, Inc. Pipe Mfg Steel Mini Mill	TX-0576	04/19/2010 TX	Vacuum Degasser Boiler for steel	No Control VOC emissions < 0.0054 lb/MMBtu, each, Good Combustion Practices (BACT - PSD)
			Rolling Mill Furnaces for steel	
V&M Star	OH-0328	04/10/2009 OH	Abrasive Manufacturing Melter Furnace for steel	No Control VOC emissions < 0.96 lb/hr (BACT - PSD)
New Steel International, Inc.	OH-0315	05/06/2008 OH	Vacuum Degas Boiler for steel	No Control VOC emissions < 0.28 lb/hr (BACT - PSD)
			Annealing Furnace for steel	No Control VOC emissions < 0.33 lb/hr (BACT - PSD)
			Tunnel Furnace for steel	No Control VOC emissions < 1.03 lb/hr (BACT - PSD)
Nucor Steel	IL-0104	10/12/2007 IL	Annealing Furnace for steel	No Control VOC emissions < 0.2 lb/hr (BACT - PSD)
			Reheating Furnace for steel	No Control VOC emissions < 0.28 lb/hr Combustion Control (BACT - PSD)
Allegheny Ludlum Corp. - Brackenridge Facility	PA-0274	02/16/2010 PA	Reheat Furnaces for steel	No Control VOC emissions < 0.0054 lb/MMBtu Effective Combustion & Operational Control (BACT - PSD)
			Active Heat Panel for steel	No Control VOC emissions < 0.0053 lb/MMBtu Effective Combustion & Operational Control (BACT - PSD)
			Active Heat Box for steel	No Control VOC emissions < 0.005 lb/MMBtu,

Plant	RBLC ID or Permit #	Date Issued and State	Facility	BACT Determination
			Annealing Furnace for steel	each, Effective Combustion & Operational Control (BACT - PSD)
Minnesota Steel Industries, LLC	MN-0070	09/07/2007 MN	Tunnel Furnace for steel	No Control VOC emissions < 0.006 lb/MMBtu (BACT - PSD)
Nucor Steel	LA-0239	05/24/2010 LA	Blast Furnace (1 & 2) for steel	No Control VOC emissions < 5.96 lb/hr Good Combustion Control (BACT - PSD)

Step 5 – Select BACT

Since SDI LaFarga, LLC has proposed to use a regenerative thermal oxidizer to control the VOC emissions from the reverberatory furnace, which is the most stringent BACT requirement, an economic, energy, or environmental impact analysis is not required.

Pursuant to 326 IAC 8-1-6, based on the BACT analysis mentioned above, IDEM, OAQ has determined that the following requirements represent BACT for the reverberatory furnace:

(a) The regenerative thermal oxidizer shall operate at all times when the reverberatory furnace is in operation.

(b) The VOC emissions after control from the reverberatory furnace shall not exceed 1.0 pound of VOC per ton of metal produced over an entire process operating cycle.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: September 30, 2011

RE: SDI LaFarga, LLC / 003-30250-00384

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.*

Enclosures
CD Memo.dot 11/14/08

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

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

TO: Brian Winters
SDI LaFarga, LLC
7575 W Jefferson Bvld
Fort Wayne, IN 46804

DATE: September 30, 2011

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

SUBJECT: Final Decision
FESOP
003-30250-00384

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:
Mark Millett – President Sectr-STLD Holdings
Tom Rarick – Environmental Resources Management (ERM)
OAQ Permits Branch Interested Parties List

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178, or toll-free at 1-800-451-6027 (ext. 3-0178), and ask to speak to the permit reviewer who prepared the permit. If you think you have received this document in error, please contact Joanne Smiddie-Brush of my staff at 1-800-451-6027 (ext 3-0185), or via e-mail at jbrush@idem.IN.gov.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

September 30, 2011

TO: Allen County Public Library

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

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

Applicant Name: **SDI LaFarga, LLC**
Permit Number: **003-30250-00384**

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 11/30/07

Mail Code 61-53

IDEM Staff	GHOTOPP 9/30/2011 SDI LaFarga, LLC 003-30250-00384 Final		AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender		Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail: **CERTIFICATE OF MAILING ONLY**

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee Remarks
1		Brian Winters SDI LaFarga, LLC 7575 W Jefferson Blvd Ft Wayne IN 46804 (Source CAATS) via confirmed delivery									
2		Mark Millett President/ Sectr- STLD Holdings SDI LaFarga, LLC 7575 W Jefferson Blvd Ft Wayne IN 46804 *(RO CAATS)*									
3		Daniel & Sandy Trimmer 15021 Yellow River Road Columbia City IN 46725 *(Affected Party)*									
4		Duane & Deborah Clark Clark Farms 6973 E. 500 S. Columbia City IN 46725 *(Affected Party)*									
5		Mr. Victor Locke WPTA-TV P.O.Box 2121 Fort Wayne IN 46801 *(Affected Party)*									
6		Allen County Public Library 900 Library Plaza, P.O. Box 2270 Fort Wayne IN 46802 *(Library)*									
7		Fort Wayne City Council and Mayors Office One Main Street Fort Wayne IN 46802 *(Local Official)*									
8		Mr. John E. Hampton Plumbers & Steamfitters, Local 166 2930 W Ludwig Rd Fort Wayne IN 46818-1328 *(Affected Party)*									
9		New Haven City Council and Mayors Office P.O. Box 570 New Haven IN 46774 *(Local Official)*									
10		Allen Co. Board of Commissioners One Main St. Fort Wayne IN 46802 *(Local Official)*									
11		Fort Wayne-Allen County Health Department 1 E Main Street, 5th Floor Fort Wayne IN 46802-1810 *(Health Department)*									
12		Tom Rarick Environmental Resources Management (ERM) 11350 N Meridian Suite 320 Carmel IN 46032 *(Consultant)*									
13		Mark Zeltwanger 26545 CR 52 Nappanee IN 46550 (Affected Party)									
14		Myron & Cheryl Reed 12728 Edgerton Rd New Haven IN 46774 *(Affected Party)*									
15		Dan Bremer 2824 Webster Rd Monroeville IN 46773 *(Affected Party)*									

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is $50,000 per piece subject to a limit of $50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is $500. The maximum indemnity payable is $25,000 for registered mail, sent with optional postal insurance. See ***Domestic Mail Manual*** **R900, S913**, and **S921** for limitations of coverage on inured and COD mail. See ***International Mail Manual*** for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
14			

FACSIMILIE OF PS Form 3877

Mail Code 61-53

IDEM Staff	GHOTOPP 9/30/2011 SDI LaFarga, LLC 003-30250-00384 Final		AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender		Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail: **CERTIFICATE OF MAILING ONLY**

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee Remarks
1		Vivian Sade Journal Gazette 300 W. Main St. Fort Wayne IN 46802 (Affected Party)									
2		Carol Williams 5828 Monarch Drive Fort Wayne IN 45815 *(Affected Party)*									
3		Laurie A. Johnson 3384 Brantley Drive New Haven IN 46774 *(Affected Party)*									
4		Ann Tzynka 4012 Willow Bay Drive New Haven IN 46774 *(Affected Party)*									
5		Rise Vandenburg 6404 E Canal Point Lane Fort Wayne IN 46804 *(Affected Party)*									
6		Tanya Spangler 20720 Edgerton Road Woodburn IN 46797 *(Affected Party)*									
7		Sam & Renee Spieth 19203 Edgerton Road Woodburn IN 46797 *(Affected Party)*									
8		Ron Hartmann 17331 Far Creek Road New Haven IN 46774 *(Affected Party)*									
9		Pamela S. Berning 9303 Lortie Road Monroeville IN 46773 *(Affected Party)*									
10		Robert & Diana Messman 11025 Lookport Way #105 New Haven IN 46774 *(Affected Party)*									
11		Matthew & Cathlen Werling 14004 Harper Road New Haven IN 46774 *(Affected Party)*									
12		Bill & Jennifer Chapman 2120 Bluecrest Road Woodburn IN 46797 *(Affected Party)*									
13		Jim Holmes 18228 Linocoln Hwy E Monroeville IN 46773 (Affected Party)									
14		Ron & Rita Girardot 7337 Bull Rapids Road Woodburn IN 46797 *(Affected Party)*									
15		Donald A & Pat Sarrazine 14621 Rohman Road New Haven IN 46774 *(Affected Party)*									

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is $50,000 per piece subject to a limit of $50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is $500. The maximum indemnity payable is $25,000 for registered mail, sent with optional postal insurance. See ***Domestic Mail Manual*** **R900, S913**, and **S921** for limitations of coverage on inured and COD mail. See ***International Mail Manual*** for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
15			

FACSIMILIE OF PS Form 3877

Mail Code 61-53

IDEM Staff	GHOTOPP 9/30/2011 SDI LaFarga, LLC 003-30250-00384 Final		AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender	▶	Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail: **CERTIFICATE OF MAILING ONLY**

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee Remarks
1		Aaron W Abbott 16829 Edgerton Road New Haven IN 46774 (Affected Party)									
2		Christina Gatehill 9634 Ballymore Drive Fort Wayne IN 46835 *(Affected Party)*									
3		Ron & Ladonna Bower 20709 Dawkins Road Woodburn IN 46797 *(Affected Party)*									
4		Tammy & Chris Spieth 18726 Howe Road Monroeville IN 46773 *(Affected Party)*									
5		Pamela Cobb 1416 North Park New Haven IN 46774 *(Affected Party)*									
6		Jerry & Marge Avery 17319 Edgerton Road New Haven IN 46774 *(Affected Party)*									
7		Helene Spieth 18918 Howe Road Monroeville IN 46773 *(Affected Party)*									
8		Barbara Wyss 17635 Edgerton Road New Haven IN 46774 *(Affected Party)*									
9		Robert Humphreys 2124 Cimarron Pass Fort Wayne IN 46815 *(Affected Party)*									
10		James F & Joyce Martin 16913 Edgerton Road New Haven IN 46774 *(Affected Party)*									
11		Ellis McCann 1724 Orkney Lane New Haven IN 46774 *(Affected Party)*									
12		Helen Miller 1606 E MacGregor Drive New Haven IN 46774 *(Affected Party)*									
13		Lynn A Werling 1730 Orkney Lane New Haven IN 46774 (Affected Party)									
14		Sharon Kline 1339 Rose Ave New Haven IN 46774 *(Affected Party)*									
15		Lisa Ward 7004 Blackhawk Fort Wayne IN 46774 *(Affected Party)*									

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is $50,000 per piece subject to a limit of $50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is $500. The maximum indemnity payable is $25,000 for registered mail, sent with optional postal insurance. See ***Domestic Mail Manual*** **R900, S913**, and **S921** for limitations of coverage on inured and COD mail. See ***International Mail Manual*** for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
15			

FACSIMILIE OF PS Form 3877

Mail Code 61-53

IDEM Staff	GHOTOPP 9/30/2011 SDI LaFarga, LLC 003-30250-00384 Final		AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender		Type of Mail: **CERTIFICATE OF MAILING ONLY**	

Indiana Department of Environmental Management
Office of Air Quality – Permits Branch
100 N. Senate
Indianapolis, IN 46204

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee Remarks
1		Jamie Davis 11933 Monroeville Road Monroeville IN 46773 (Affected Party)									
2		Resident 12009 Dawkins Road New Haven IN 46774 *(Affected Party)*									
3		Robert Viggiano 1107 N Berthaud Road New Haven IN 46774 *(Affected Party)*									
4		Kirk Kneller 7010 Hartzell Road Fort Wayne IN 46816 *(Affected Party)*									
5		Tom & Sandy Bauermeister 16219 Gar Creek Road New Haven IN 46774 *(Affected Party)*									
6		Deb Zeckzer 4016 Bridgewood Ct New Haven IN 46774 *(Affected Party)*									
7		Kevni & Vickie Koenig 13002 US 30 E New Haven IN 46774 *(Affected Party)*									
8		Byron LePierre 14512 Dawkins Road New Haven IN 46774 *(Affected Party)*									
9		Dan Melcher 2631 Ryan Road New Haven IN 46774 *(Affected Party)*									
10		Greg Emenhiser 3522 Roussey Road Monroeville IN 46773 *(Affected Party)*									
11		Ira Zelt 19328 Edgerton Road Woodburn IN 46797 *(Affected Party)*									
12		Brenda Schuller 3728 Webster Road Woodburn IN 46797 *(Affected Party)*									
13		Robert & Mary Richart 2930 N Berthaud Road New Haven IN 46774 (Affected Party)									
14		Dolores C Lomont 16806 Lincoln Highway E New Haven IN 46774 *(Affected Party)*									
15		Theresa L Coonrod 17515 Edgerton Road New Haven IN 46774 *(Affected Party)*									

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is $50,000 per piece subject to a limit of $50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is $500. The maximum indemnity payable is $25,000 for registered mail, sent with optional postal insurance. See ***Domestic Mail Manual*** **R900, S913**, and **S921** for limitations of coverage on inured and COD mail. See ***International Mail Manual*** for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
15			

FACSIMILIE OF PS Form 3877

Mail Code 61-53

IDEM Staff	GHOTOPP 9/30/2011 SDI LaFarga, LLC 003-30250-00384 Final		AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender	▶	Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail: **CERTIFICATE OF MAILING ONLY**

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee Remarks
1		Darrel Dodane 14915 Lincoldn Highway E New Haven IN 46774 (Affected Party)									
2		Roger W & Donnalyn Melcher 2631 Ryan Road New Haven IN 46774 *(Affected Party)*									
3		Connie Linker 2023 N Berthaud Road New Haven IN 46774 *(Affected Party)*									
4		Julie Burkhart 2716 Cooper Hil Run Fort Wayne IN 46804 *(Affected Party)*									
5		Jon & Carolyn Meyer 835 S Roysse y Road New Haven IN 46774 *(Affected Party)*									
6		Larry Zehr 15030 Dawkins Road New Haven IN 46774 *(Affected Party)*									
7		Bonnie Monhollen 15010 Dawkins Road New Haven IN 46774 *(Affected Party)*									
8		Janie Baker 724 Landin Road New Haven IN 46774 *(Affected Party)*									
9		Charles & Helen Bandelier 12924 Edgerton Road New Haven IN 46774 *(Affected Party)*									
10		Rachel & Kevin Dibble 14916 Dawkins Road New Haven IN 46774 *(Affected Party)*									
11		Gene & Karen Curless 816 S Roussey Road New Haven IN 46774 *(Affected Party)*									
12		Marijane Crowe 3910 Ryan Road New Haven IN 46774 *(Affected Party)*									
13		Michael Henry 3428 S Ryan Road New Haven IN 46774 (Affected Party)									
14		Amy Thompson 13305 Paulding Road New Haven IN 46774 *(Affected Party)*									
15		John Heintzerlman 208 Allen St Monroeville IN 46773 *(Affected Party)*									

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is $50,000 per piece subject to a limit of $50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is $500. The maximum indemnity payable is $25,000 for registered mail, sent with optional postal insurance. See ***Domestic Mail Manual*** **R900, S913**, and **S921** for limitations of coverage on inured and COD mail. See ***International Mail Manual*** for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
15			

FACSIMILIE OF PS Form 3877

Mail Code 61-53

IDEM Staff	GHOTOPP 9/30/2011 SDI LaFarga, LLC 003-30250-00384 Final		AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender	▶	Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail: **CERTIFICATE OF MAILING ONLY**

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee Remarks
1		Phil Gerardot 10823 State Road 101 Monroeville IN 46773 (Affected Party)									
2		Josh Doutt 3611 Norland Lane New Haven IN 46774 *(Affected Party)*									
3		Mandy Leadock 2604 River Cove Trl Fort Wayne IN 46825 *(Affected Party)*									
4		Mary Ann Case 3815 Eastway Dr Fort Wayne IN 46806 *(Affected Party)*									
5		William Gerardot 8430 Franke Road Fort Wayne IN 46816 *(Affected Party)*									
6		Danielle Crum 1107 N Berthaud Road New Haven IN 46774 *(Affected Party)*									
7		Lowell & Patricia Werling 211 N Berthaud Road New Haven IN 46774 *(Affected Party)*									
8		John Ohneck 4214 Mirada Drive Fort Wayne IN 46816 *(Affected Party)*									
9		Kim haley 4037 Olieven Cv New Haven IN 46774 *(Affected Party)*									
10		Walter Werling 713 N. Berthaud Road New Haven IN 46774 *(Affected Party)*									
11		Chris Werling 13519 US 24 East New Haven IN 46774 *(Affected Party)*									
12		Greg Asher 133 W Lincoln Hwy #3 New Haven IN 46774 *(Affected Party)*									
13		Adam McHenry 2416 Dellwood Drive Fort Wayne IN 46803 (Affected Party)									
14		Bruce Harnish 1210 Hartzell St New Haven IN 46774 *(Affected Party)*									
15		Denny Melcher 12609 Harper Road New Haven IN 46774 *(Affected Party)*									

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is $50,000 per piece subject to a limit of $50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is $500. The maximum indemnity payable is $25,000 for registered mail, sent with optional postal insurance. See ***Domestic Mail Manual*** **R900, S913**, and **S921** for limitations of coverage on inured and COD mail. See ***International Mail Manual*** for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
15			

FACSIMILIE OF PS Form 3877

Mail Code 61-53

IDEM Staff	GHOTOPP 9/30/2011 SDI LaFarga, LLC 003-30250-00384 Final		AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender	▶	Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail: **CERTIFICATE OF MAILING ONLY**

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee Remarks
1		Rod Walker 3078 Naviajo Crossing New Haven IN 46774 (Affected Party)									
2		James Cox 2018 Sunnymede Drive Fort Wayne IN 46803 *(Affected Party)*									
3		Cassondra & Doug Geller 1446 Scots Lane New Haven IN 46774 *(Affected Party)*									
4		Lori Fisher 221 Twillo Run Road New Haven IN 46774 *(Affected Party)*									
5		Bob Hunt 7524 Antebellum Blvd Fort Wayne IN 46815 *(Affected Party)*									
6		Brian Rice 419 Henry Street New Haven IN 46774 *(Affected Party)*									
7		Don & Rebecca Markley 15311 Harper Road New Haven IN 46774 *(Affected Party)*									
8		Anita Collins 14622 Harper Road New Haven IN 46774 *(Affected Party)*									
9		Steve Huckeriede 503 N Webster road New Haven IN 46774 *(Affected Party)*									
10		Bertha Ladd 13929 Harper Road New Haven IN 46774 *(Affected Party)*									
11		Jane & Ray Melcher 13119 Harper Road New Haven IN 46774 *(Affected Party)*									
12		Chad Smith 16035 Venison Trl Wodburn IN 46797 *(Affected Party)*									
13		Nicke Goranson 1103 Seward St New Haven IN 46774 (Affected Party)									
14		Scott Reinig 14802 Dawkins Road New Haven IN 46774 *(Affected Party)*									
15		Larry Coomer 4424 Lortie Road Monroeville IN 46773 *(Affected Party)*									

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is $50,000 per piece subject to a limit of $50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is $500. The maximum indemnity payable is $25,000 for registered mail, sent with optional postal insurance. See ***Domestic Mail Manual*** **R900, S913**, and **S921** for limitations of coverage on inured and COD mail. See ***International Mail Manual*** for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
15			

FACSIMILIE OF PS Form 3877

Mail Code 61-53

IDEM Staff	GHOTOPP 9/30/2011 SDI LaFarga, LLC 003-30250-00384 Final		AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender	▶	Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail: **CERTIFICATE OF MAILING ONLY**

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee Remarks
1		Bill Rondot 1413 Dundee Drive New Haven IN 46774 (Affected Party)									
2		Nick Miller 636 Brandford Ct New Haven IN 46774 *(Affected Party)*									
3		Abigail Frost-King 1901 Niagara Drive Fort Wayne IN 46805 *(Affected Party)*									
4		Tom Meyer 18409 Woodburn Road Woodburn IN 46797 *(Affected Party)*									
5		Fritz Grote 918 Brookdale Drive New Haven IN 46774 *(Affected Party)*									
6		Frederick Laurant 923 Keller Drive New Haven IN 46774 *(Affected Party)*									
7		Stanley Spieth 1635 S Webster Road New Haven IN 46774 *(Affected Party)*									
8		Diane Zehr 1110 Hartzell St New Haven IN 46774 *(Affected Party)*									
9		Rick Alt & Penny ruppert-Alt 41928 Dawkins Road New Haven IN 46774 *(Affected Party)*									
10		John and Dawn Cuellar 1617 Orhay Lane New Haven IN 46774 *(Affected Party)*									
11		Abigail King Save Maumee Grassroots Org. 1901 Niagara Drive Fort Wayne IN 46805 *(Affected Party)*									
12		Carl Kelley 6327 Dirwood Ct Fort Wayne IN 46804 *(Affected Party)*									
13		Celia Garza 826 Oak Street New Haven IN 46774 (Affected Party)									
14		Dean Robinson 4920 Bahama lane Fort Wayne IN 46815 *(Affected Party)*									
15		Kieth Peters 15730 Rorick Road New Haven IN 46774 *(Affected Party)*									

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is $50,000 per piece subject to a limit of $50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is $500. The maximum indemnity payable is $25,000 for registered mail, sent with optional postal insurance. See ***Domestic Mail Manual*** **R900, S913**, and **S921** for limitations of coverage on inured and COD mail. See ***International Mail Manual*** for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
15			

FACSIMILIE OF PS Form 3877

Mail Code 61-53

IDEM Staff	GHOTOPP 9/30/2011 SDI LaFarga, LLC 003-30250-00384 Final		AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender		Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail: **CERTIFICATE OF MAILING ONLY**

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee Remarks
1		Arlene OKeefe 7920 Wildberry Lane Fort Wayne IN 46815 (Affected Party)									
2		Carol & John Bowers 14520 Lincoln Highway E New Haven IN 46774 *(Affected Party)*									
3		Don Tinkham 6021 Minnich Road New Haven IN 46774 *(Affected Party)*									
4		David Sell 15423 Harper Road New Haven IN 46774 *(Affected Party)*									
5		Katherine Goldin PO Box 381 Woodburn IN 46797 *(Affected Party)*									
6		Dand Bremer 2842 Webster Road Monroeville IN 46773 *(Affected Party)*									
7		Marlin & Shirley Culy 16406 Gar Creek Road New Haven IN 46774 *(Affected Party)*									
8		Roay A Buskrik 11015 Coverdale Road Fort Wayne IN 46809 *(Affected Party)*									
9		Lenore Loos 1520 N Park Drive New Haven IN 46774 *(Affected Party)*									
10		Chris Prentice 225 Park Avenue South, 6th Floor New York NY 10003 *(Affected Party)*									
11		Madelynne Hostelter 111 S Webster Road New Haven IN 46774 *(Affected Party)*									
12		Ruth Wahle 14829 Bremer New Haven IN 46774 *(Affected Party)*									
13		Mark & Rachel Phillips 2005 Berthaud New Haven IN 46774 (Affected Party)									
14		Jeremy Moehring 1206 N Weebster New Haven IN 46774 *(Affected Party)*									
15		Melissa Mattes 1510 Main Street New Haven IN 46774 *(Affected Party)*									

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is $50,000 per piece subject to a limit of $50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is $500. The maximum indemnity payable is $25,000 for registered mail, sent with optional postal insurance. See ***Domestic Mail Manual*** **R900, S913**, and **S921** for limitations of coverage on inured and COD mail. See ***International Mail Manual*** for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
15			

FACSIMILIE OF PS Form 3877

Mail Code 61-53

IDEM Staff	GHOTOPP 9/30/2011 SDI LaFarga, LLC 003-30250-00384 Final		AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender	▶	Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail: **CERTIFICATE OF MAILING ONLY**

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee Remarks
1		Marc Werling 14234 Harper Road New Haven IN 46774 (Affected Party)									
2		Christine & Jonathan Howard 15028 Harper Road New Haven IN 46774 *(Affected Party)*									
3		Dena Grostifor 14615 Bremer New Haven IN 46774 *(Affected Party)*									
4		Christopher R Stark 1313 Aberdeen Lane New Haven IN 46774 *(Affected Party)*									
5		Angela Withered 9406 Vista Park Drive New Haven IN 46774 *(Affected Party)*									
6		Paul Schilb 9723 Forest Creek Drive Fort Wayne IN 46835 *(Affected Party)*									
7											
8											
9											
10											
11											
12											
13											
14											
15											

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is $50,000 per piece subject to a limit of $50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is $500. The maximum indemnity payable is $25,000 for registered mail, sent with optional postal insurance. See ***Domestic Mail Manual*** **R900, S913**, and **S921** for limitations of coverage on inured and COD mail. See ***International Mail Manual*** for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
6			

FACSIMILIE OF PS Form 3877