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: February 8, 2011

RE: General Motors / 093 - 29428 - 00007

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 13-17-3-4 and 326 IAC 2, this permit modification is effective immediately, unless a petition for stay of effectiveness is filed and granted, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-7-3 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 Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) 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.

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

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

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

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

Enclosures
FNTV-PMOD.doc 3/27/08

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Mr. Jeffrey Hummel
Senior Environmental Engineer
105 GM Drive
Bedford, IN 47421

February 8, 2011

Re: 093-29428-00007
Significant Permit Modification to
Part 70 Renewal No.: T 093-26058-00007

Dear Mr. Hummel:

General Motors, LLC was issued a Part 70 Operating Permit Renewal on May 22, 2009, for an aluminum die casting facility and an aluminum foundry. A letter requesting changes to this permit was received on July 2, 2010. Pursuant to the provisions of 326 IAC 2-7-12 a significant permit modification to this permit is hereby approved as described in the attached Technical Support Document.

All other conditions of the permit shall remain unchanged and in effect. For your convenience, the entire Part 70 Operating Permit as modified will be provided at issuance. A copy of this permit is available on the Internet at: www.in.gov/ai/appfiles/idem-caats/.

This decision is subject to the Indiana Administrative Orders and Procedures Act – IC 4-21.5-3-5. If you have any questions on this matter, please contact Jillian Bertram, OAQ, 100 North Senate Avenue, MC 61-53, Room 1003, Indianapolis, Indiana, 46204-2251, or call at (800) 451-6027, and ask for Jillian Bertram or extension (3-1782), or dial (317) 233-1782.

Sincerely,

Donald F Robin for

Tripurari P. Sinha, Ph. D., Section Chief
Permits Branch
Office of Air Quality

Attachments:
Updated Permit
Technical Support Document
PTE Calculations

Reviewer initials

cc: File – Lawrence County
Lawrence County Health Department
U.S. EPA, Region V
Compliance and Enforcement Branch

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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Indianapolis, Indiana 46204
(317) 232-8603
Toll Free (800) 451-6027
www.idem.IN.gov

Part 70 Operating Permit Renewal
OFFICE OF AIR QUALITY

General Motors LLC
105 GM Drive
Bedford, Indiana 47421

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

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

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

Operation Permit No.: T 093-26058-00007	
Issued by: Tripurari P. Sinha, Ph. D., Section Chief Permits Branch Office of Air Quality	Issuance Date: May 22, 2009 Expiration Date: May 22, 2014

First Administrative Amendment No.: 093-28250-00007
Second Administrative Amendment No.: 093-28273-00007
Third Administrative Amendment No.: 093-28615-00007

Significant Permit Modification No.: 093-29428-00007	
Issued by: Donald F Robin for Tripurari P. Sinha, Ph. D., Section Chief Permits Branch Office of Air Quality	Issuance Date: February 8, 2011 Expiration Date: May 22, 2014

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SECTION A SOURCE SUMMARY

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

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

The Permittee owns and operates a stationary aluminum die casting facility and aluminum foundry.

Source Address:	105 GM Drive, Bedford, Indiana 47421
General Source Phone Number:	812-279-7271
SIC Code:	3363, 3365
County Location:	Lawrence
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Operating Permit Program Minor Source, under PSD Area Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

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

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

Chip Processing

(a) One (1) natural gas-fired aluminum chip dryer, identified as CHIP-2, with a maximum capacity of 7.60 tons of scrap aluminum chips per hour, and a nominal heat input capacity of 6.83 million Btu per hour for the chip dryer drum, using an afterburner and a baghouse, identified as AB-1, as control, constructed in 1974, and exhausting to stack 10.

Die Cast Melting

(b) One (1) natural gas-fired reverberatory holding furnace, identified as RF-2 and as DC MELT B - #2, with a maximum capacity of 6.25 tons of metal per hour and 0.1 pounds of inorganic flux per ton of metal, and a maximum heat input capacity of 25 million Btu per hour, with emissions uncontrolled, constructed in 1999, and exhausting to stacks 2-1 and 2-2.

(c) One (1) natural gas-fired reverberatory furnace, identified as RF-11 and as DC MELT A - #11, with a maximum capacity of 5.1 tons of metal per hour and 7 pounds of inorganic flux per ton of metal, and a maximum heat input capacity of 20.4 million Btu per hour, with emissions uncontrolled, constructed in 1974, and exhausting to stacks 55, 56, and RF-11-HS.

(d) One (1) natural gas-fired reverberatory melting furnace, identified as RF-12 and as DC MELT A - #12, with a maximum capacity of 10.0 tons of metal per hour and 7 pounds of inorganic flux per ton of metal, and a maximum heat input capacity of 40.0 million Btu per hour, with emissions uncontrolled, constructed in 1996, and exhausting to stacks 57, 58, and 17.

(e) One (1) natural gas-fired dry hearth furnace, identified as Number 10, with a maximum heat input capacity of 50 million British thermal units per hour, and a maximum capacity of 12.5 tons of aluminum per hour, with emissions uncontrolled, constructed in 2002, and exhausting to stacks DH-10-1, DH-10-2, and DH-10-3.

(f) One (1) natural gas-fired dry hearth furnace, identified as DC No. 9, with a maximum capacity of 22.5 tons of aluminum per hour, a maximum inorganic flux usage of 7.0 pounds per ton of metal, and a maximum heat input capacity of 90 million British thermal units per hour, with emissions uncontrolled, constructed in 2006, and exhausting to stacks 9-1, 9-2, and 9-3.

SPM Melting Operations

(g) Three (3) natural gas-fired stack melting furnaces, identified as Line 1 Stack Melter, Line 2 Stack Melter, and Line 3 Stack Melter, approved for construction in 2010, each with a nominal capacity of five (5) tons of metal per hour, 0.1955 pounds of inorganic flux per ton of metal, and 0.1019 pounds of organic flux per ton of metal, and each with a heat input capacity of 11.1 MMBtu/hr with emissions from each controlled by a baghouse.

Semi-Permanent Mold (SPM) Lines

(o) Three (3) Semi-Permanent Mold (SPM) Lines consisting of pouring, cooling, and extraction, identified as SPM Line 1, SPM Line 2, and SPM Line 3, approved for construction in 2010, each with a nominal capacity of 60 molds per hour using 1.6 tons of molten aluminum and 2 tons of core sand per hour, with emissions from each controlled by a baghouse.

Core Room Operations

(p) Three (3) core sand silos with sand handling equipment, identified collectively as Sand Handling, approved for construction in 2010, each with a capacity of 60 tons, with emissions from all controlled by a baghouse.

(q) Two (2) core sand mixers, identified as Sand Mix 1 and Sand Mix 2, approved for construction in 2010, with a nominal capacity of 22.5 tons per hour, each, with one unit operating and one unit as a backup, with emissions from each controlled by baghouse.

(r) Five (5) epoxy acrylic core machines, identified as Core Make 1 through 5, approved for construction in 2010, each with a maximum capacity of 2.64 tons of cores per hour with 1.3% resin content, each using approximately 16 pounds per ton of sulfur dioxide catalyst, with four operating and one unit as a backup, with emissions from all controlled by a caustic scrubber.

(s) One (1) natural gas-fired thermal sand reclamation system, identified as Sand Reclaim, with a maximum nominal capacity of 6.0 tons of sand per hour and a maximum heat input of 6.0 MMBtu/hr, with emissions controlled by a baghouse. [An affected facility under NSPS UUU].

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

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

(a) Degreasing operations that do not exceed one hundred forty-five (145) gallons per twelve (12) months, except if subject to 326 IAC 20-6. [326 IAC 8-3-2, 326 IAC 8-3-5].

(b) The following equipment related to manufacturing activities not resulting in the emission of HAPs: [326 IAC 6-3-2].

(aa) Brazing.

(bb) Cutting torches.

(cc) Soldering.

(dd) Welding.

(c) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors, and electrostatic precipitators with a design grain loading of less than or equal to three one-hundredths (0.03) grains per actual cubic foot and a gas flow rate less than or equal to four thousand (4,000) actual cubic feet per minute, including the following:

(AA) Deburring.

(BB) Buffing.

(CC) Polishing.

(DD) Abrasive blasting.

(EE) Pneumatic conveying.

(FF) Woodworking operations.

(d) Emission units with PM and PM_{10} emissions less than five (5) tons per year, SO_2, NOx, and VOC emissions less than ten (10) tons per year, CO emissions less than twenty-five (25) tons per year, lead emissions less than two-tenths (0.2) tons per year, single HAP emissions less than one (1) ton per year, and combination of HAPs emissions less than two and a half (2.5) tons per year.

(1) Chip and crushed material storage piles [326 IAC 6-4];

(2) Spinning Nozzle Injection Flux (SNIF) units [326 IAC 6-3-2];

(3) Refractory powder mixing stations [326 IAC 6-3-2];

(4) Maintenance cutoff saws [326 IAC 6-3-2];

(5) Ladle weigh stations [326 IAC 6-3-2];

(6) Die cast machines and associated small holding furnaces [326 IAC 6-3-2];

(7) Maintenance paint spray and mold ladle coating booths [326 IAC 6-3-2]

(8) Covered and underground conveyors [326 IAC 6-3-2];

(9) Chip feed hoppers [326 IAC 6-3-2]; and

(10) EDM carbon etchers, tool sharpening, abrasive cleaning, and small sand blasters [326 IAC 6-3-2].

(11) Pre-machining operation controlled by a mist collector [326 IAC 6-3-2]

(e) Combustion related activities, including natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour.

(1) One (1) natural gas-fired administration building boiler, with a nominal capacity of 8.4 MMBtu/hr, manufactured in 1952 [326 IAC 6-2-3].

(f) Activities associated with emergencies, including the following:

(1) Emergency generators as follows:

(a) Diesel generators not exceeding one thousand six hundred (1,600) horsepower.

(2) Stationary fire pump engines.

(g) Natural gas-fired combustion sources with heat input equal to or less than ten (10) MMBtu/hr including but not limited to the following:

Three (3) production back-up mold preheat burners
Two (2) Line 1 mold coat touch up area burners
Two (2) Line 2 mold coat touch up area burners
Two (2) Line 3 mold coat touch up area burners
Six (6) Line 1 mold line carousel burners
Six (6) Line 2 mold line carousel burners
Six (6) Line 3 mold line carousel burners
Six (6) mold preparation area burners, including mold preheat, mold coating, and mold decoating
Two (2) solution heat treat furnaces
Two (2) aging furnaces

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

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

(a) It is a major source, as defined in 326 IAC 2-7-1(22);

(b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONDITIONS

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

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

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

(a) This permit, T 093-26058-00007, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.

(b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

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

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

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

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

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

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

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

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

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

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

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

(a) The Permittee shall furnish to IDEM, OAQ, 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. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit or, for information claimed to be confidential, the Permittee may furnish such records directly to the U.S. EPA along with a claim of confidentiality. [326 IAC 2-7-5(6)(E).]

(b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

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

(a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by the "responsible official" of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, using the attached Certification Form or another form that contains the required elements for certification with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.

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

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

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

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

and

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

(b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(c) The annual compliance certification report shall include the following:

(1) The appropriate identification of each term or condition of this permit that is the basis of the certification;

(2) The compliance status;

(3) Whether compliance was continuous or intermittent;

(4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and

(5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ may require to determine the compliance status of the source.

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

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

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) 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.

(b) The Permittee shall implement the PMPs, including any required record keeping, as necessary to ensure that failure to implement a PMP does not cause or contribute to an exceedance of any limitation on emissions or potential to emit.

(c) A copy of the PMPs shall be submitted to IDEM, OAQ 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 or potential to emit. The PMPs do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

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

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

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

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or
Telephone Number: 317-233-0178 (ask for Compliance Section)
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 2-7-5(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(9) be revised in response to an emergency.

(f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.

(g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

(h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

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

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

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

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

(c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.

(d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:

(1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;

(2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;

(3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and

(4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.

(e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).

(f) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]

(g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(8)]

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

(a) All terms and conditions of permits established prior to T 093-26058-00007 and issued pursuant to permitting programs approved into the state implementation plan have been either:

(1) incorporated as originally stated,

(2) revised under 326 IAC 2-7-10.5, or

(3) deleted under 326 IAC 2-7-10.5.

(b) Provided that all terms and conditions are accurately reflected in this permit, all previous registrations and permits are superseded by this Part 70 operating permit.

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

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

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

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

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

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)][326 IAC 2-7-8(a)][326 IAC 2-7-9]

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit.
[326 IAC 2-7-5(6)(C)] The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:

(1) That this permit contains a material mistake.

(2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.

(3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]

(c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]

(d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.17 Permit Renewal [326 IAC 2-7-3][326 IAC 2-7-4][326 IAC 2-7-8(e)]

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

Request for renewal shall be submitted to:

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

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

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

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

(c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.18 Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12]

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

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

Indiana Department of Environmental Management
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 shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

B.19 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)][326 IAC 2-7-12(b)(2)]

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

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

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

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

(1) The changes are not modifications under any provision of Title I of the Clean Air Act;

(2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;

(3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

(4) The Permittee notifies the:

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

and

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

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

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

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

(b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

(1) A brief description of the change within the source;

(2) The date on which the change will occur;

(3) Any change in emissions; and

(4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

(c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).

(d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.

(e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.21 Source Modification Requirement [326 IAC 2-7-10.5]

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

B.22 Inspection and Entry [326 IAC 2-7-6][IC 13-14-2-2][IC 13-30-3-1][IC 13-17-3-2]

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

(a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

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

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

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

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

B.23 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

(a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

(b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

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

The application which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.

(b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.

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

B.25 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314] [326 IAC 1-1-6]

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

SECTION C **SOURCE OPERATION CONDITIONS**

Entire Source

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

C.1 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 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 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of 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.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

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

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

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

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

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

C.6 Stack Height [326 IAC 1-7]

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

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

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

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

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

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

(f) Demolition and Renovation
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).

(g) Indiana Licensed Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Licensed Asbestos inspector is not federally enforceable.

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

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

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

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

Indiana Department of Environmental Management
Compliance 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 certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ 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 2-7-5(1)][326 IAC 2-7-6(1)]

C.10 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)]

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

Indiana Department of Environmental Management
Compliance 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 the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

C.11 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

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

C.12 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(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 2-7-5][326 IAC 2-7-6]

C.13 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

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

(a) The Permittee prepared and submitted written emergency reduction plans (ERPs) consistent with safe operating procedures.

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

C.14 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]

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

C.15 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. If a Permittee is required to have an Operation, Maintenance and Monitoring (OMM) Plan under 40 CFR 60/63, such plans shall be deemed to satisfy the requirements for a CRP for those compliance monitoring conditions. A CRP shall be submitted to IDEM, OAQ upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:

(1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.

(2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan to include such response steps taken.

The OMM Plan shall be submitted within the time frames specified by the applicable 40 CFR60/63 requirement.

(b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:

(1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan; or

(2) If none of the reasonable response steps listed in the Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from, or a violation of, this permit so long as the Permittee documents such response steps in accordance with this condition.

(3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.

(4) Failure to take reasonable response steps shall be considered deviation of the permit.

(c) The Permittee is not required to take any further response steps for any of the following reasons:

(1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.

(2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for a minor permit modification to the permit, and such request has not been denied.

(3) An automatic measurement was taken when the process was not operating.

(4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.

(d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.

(e) The Permittee shall record all instances when, in accordance with Section D, response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

(f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

C.16 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5][326 IAC 2-7-6]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

C.17 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

(a) Pursuant to 326 IAC 2-6-3(b)(3), starting in 2006 and every three (3) years thereafter, the Permittee shall submit by July 1 an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:

(1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);

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

The statement must be submitted to:

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

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

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

C.18 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner 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, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance or ninety (90) days of initial start-up, whichever is later.

C.19 General Reporting Requirements [326 IAC 2-7-5(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. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance 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) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(e) 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.20 Compliance with 40 CFR 82 and 326 IAC 22-1

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

(a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.

(b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

(c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Chip Processing

One (1) natural gas-fired aluminum thermal chip dryer, identified as CHIP-2, with a maximum capacity of 7.60 tons of scrap aluminum chips per hour, and a nominal heat input capacity of 6.83 million Btu per hour for the chip dryer drum, using an afterburner and a baghouse, identified as AB-1, as control, constructed in 1974, and exhausting to stack 10.

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

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

D.1.1 PSD Minor Limit [326 IAC 2-2]

Pursuant to SSM093-13639-00007, issued June 16, 2002, the Permittee shall comply with the following limitations:

(a) The PM emissions from the thermal chip dryer (CHIP-2) shall not exceed 1.37 pounds per ton of metal.

(b) The PM_{10} emissions from the thermal chip dryer (CHIP-2) shall not exceed 1.37 pounds per ton of aluminum chips.

(c) The VOC emissions from the thermal chip dryer (CHIP-2) shall not exceed 2.0 pounds per ton of aluminum chips.

(d) Metal throughput to the thermal chip dryers (CHIP-2) shall not exceed 66576 tons per twelve (12) month consecutive period with compliance determined at the end of each month.

Compliance with the above limit combined with Conditions D.2.1, D.4.1, D.5.1, D.7.1, and the PTE of other emission unit, shall limit PM from the entire source to less than 250 tons per twelve (12) month consecutive period and render 326 IAC 2-2 not applicable to the entire source.

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

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes) and SSM 093-13639-00007 issued June 16, 2002, the particulate from the aluminum thermal chip dryer (CHIP-2) shall not exceed 15.96 pounds per hour when operating at a process weight rate of 7.60 tons of aluminum per hour. The pound per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 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.1.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan is required for the thermal chip dryer (CHIP-2), the baghouse and the afterburner. Section B- Preventive Maintenance Plan contains the Permittee's obligations with regard to Preventive Maintenance Plans.

Compliance Determination Requirements

D.1.4 Control Device Operation [[326 IAC 2-7-6]

(a) Pursuant to SSM 093-13639-00007, issued June 16, 2002, and in order to comply with Condition D.1.1, the afterburner shall be in operation at all times when the thermal chip dryer (CHIP-2) is in operation.

(b) Pursuant to SSM 093-13639-00007, issued June 16, 2002, and in order to comply with Conditions D.1.1 and D.1.2, the baghouse shall be in operation at all times when the thermal chip dryer (CHIP-2) is in operation.

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

D.1.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Pursuant to SSM 093-13639-00007, issued June 16, 2002, by August 25, 2015, the Permittee shall perform PM, PM10, and VOC testing using methods as approved by the Commissioner, in order to demonstrate compliance with Conditions D.1.1 and D.1.2. These tests shall be repeated at least five (5) years from the date of this valid compliance demonstration. Section C-Performance Testing contains the Permittee's obligation with regard to performance testing.

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

D.1.6 Visible Emissions Notations

(a) Visible emission notations of the thermal chip dryer (CHIP-2) stack exhaust shall be performed once per week during normal daylight operations when the chip dryer operates for more than one daylight hour. A trained employee shall record whether emissions are normal or abnormal.

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

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

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

(e) The Compliance Response Plan, or its equivalent (e.g.,Operation, Maintenance and Monitoring (OM&M)) for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response shall be considered a deviation from this permit. Section C--Compliance Response Plan - Preparation, Implementation, Records, and Reports contains the Permittee's obligation with regard to compliance response plans.

D.1.7 Parametric Monitoring

(a) The Permittee shall record the pressure drop across the thermal chip dryer baghouse at least once per day when the thermal chip dryer is in operation. When for any one 15-minute block average reading, the pressure drop across the baghouse is outside the normal range of 0.2 to 7.0 inches of water, the Permittee shall take reasonable response steps. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit. Section C--Compliance Response Plan -Preparation, Implementation, Records, and Reports contains the Permittee's obligation with regard to response steps.

(b) The instruments 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 twice a year. The calibrations will not be completed in consecutive months.

D.1.8 Broken or Failed Bag Detection

(a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

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

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

D.1.9 Record Keeping Requirements

(a) To document compliance with Condition D.1.6 - Visible Emission Notations, the Permittee shall maintain weekly records of the visible emission notations of the thermal chip dryer (CHIP-2) stack exhaust. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of a visible emission notation, (e.g. the process did not operate that day).

(b) In order to document compliance with condition D.1.7 - Parametric Monitoring, the Permittee shall maintain the daily records of the pressure drop across the baghouse controlling the chip dryer (CHIP-2). 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).

(a) All records shall be maintained. Section C- General Record Keeping requirements contains the Permittee's obligation with regard to response steps.

D.1.10 Reporting Requirements

(h) A quarterly summary of the information to document compliance with Condition D.1.1(d) shall be submitted to the address in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Die Cast Melting

(a) One (1) natural gas-fired reverberatory holding furnace, identified as RF-2 and as DC MELT B - #2, with a maximum capacity of 6.25 tons of metal per hour and 0.1 pounds of inorganic flux per ton of metal, and a maximum heat input capacity of 25 million Btu per hour, with emissions uncontrolled, constructed in 1999, and exhausting to stacks 2-1 and 2-2.

(b) One (1) natural gas-fired reverberatory furnace, identified as RF-11 and as DC MELT A - #11, with a maximum capacity of 5.1 tons of metal per hour and 7 pounds of inorganic flux per ton of metal, and a maximum heat input capacity of 20.4 million Btu per hour, with emissions uncontrolled, constructed in 1974, and exhausting to stacks 55, 56, and RF-11-HS.

(c) One (1) natural gas-fired reverberatory melting furnace, identified as RF-12 and as DC MELT A - #12, with a maximum capacity of 10.0 tons of metal per hour and 7 pounds of inorganic flux per ton of metal, and a maximum heat input capacity of 40.0 million Btu per hour, with emissions uncontrolled, constructed in 1996, and exhausting to stacks 57, 58, and 17.

(d) One (1) natural gas-fired dry hearth furnace, identified as Number 10, with a maximum heat input capacity of 50 million British thermal units per hour, and a maximum capacity of 12.5 tons of aluminum per hour, with emissions uncontrolled, constructed in 2002, and exhausting to stacks DH-10-1, DH-10-2, and DH-10-3.

(e) One (1) natural gas-fired dry hearth furnace, identified as DC No. 9, with a maximum capacity of 22.5 tons of aluminum per hour, a maximum inorganic flux usage of 7.0 pounds per ton of metal, and a maximum heat input capacity of 90 million British thermal units per hour, with emissions uncontrolled, constructed in 2006, and exhausting to stacks 9-1, 9-2, and 9-3.

SPM Melting Operations

(n) Three (3) natural gas-fired stack melting furnaces, identified as Line 1 Stack Melter, Line 2 Stack Melter, and Line 3 Stack Melter, approved for construction in 2010, each with a nominal capacity of five (5) tons of metal per hour, 0.1955 pounds of inorganic flux per ton of metal, and 0.1019 pounds of organic flux per ton of metal, and each with a heat input capacity of 11.1 MMBtu/hr with emissions from each controlled by a baghouse.

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

D.2.1 PSD Minor Limit [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (PSD) not applicable the Permittee shall comply with the following limits:

(a) The total amount of metal melted by all the furnaces combined shall not exceed 175,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

(b) The PM emissions from each of the furnaces, other than furnace DC No. 9, shall not exceed 1.78 pounds per ton of metal melted averaged over the melt cycle.

(c) The PM10 emissions from each of the furnaces, other than furnace DC No. 9, shall not

exceed 1.78 pounds per ton of metal melted averaged over the melt cycle.

(d) The PM emissions from furnace DC No. 9 shall not exceed 1.28 pounds per ton of metal melted averaged over the melt cycle.

(e) The PM10 emissions from furnace DC No. 9 shall not exceed 1.28 pounds per ton of metal melted averaged over the melt cycle.

Compliance with the above limit combined with Conditions D.2.1, D.4.1, D.5.1, D.7.1, and the PTE of other emission unit, shall limit PM from the entire source to less than 250 tons per twelve (12) month consecutive period and render 326 IAC 2-2 not applicable to the entire source. These limits are necessary in order that the source maintain minor PSD status; therefore, the requirements of 326 IAC 2-2 are not applicable to the units constructed after 1977.

D.2.2 HAP Area Source Limits

In order to render the requirements of 326 IAC 2-4.1 not applicable, the Permittee shall comply with the following limits:

(a) The amount of organic flux used in all of the furnaces combined shall not exceed 34,909 pounds per twelve (12) consecutive month period with compliance determined at the end of each month, where 100 pounds of inorganic flux is equivalent to 1 pound of organic flux.

(b) The HCl emissions from the use of organic flux shall not exceed 0.55 pounds per pound of organic flux used.

(c) The HF emissions from the use of organic flux shall not exceed 0.06 pounds per pound of organic flux used.

(d) The hexachloroethane emissions from the use of organic flux shall not exceed 0.004 pounds per pound of organic flux used.

(e) The HCl emissions from the use of inorganic flux shall not exceed 0.005 pounds per pound of inorganic flux used.

(f) The HF emissions from the use of inorganic flux shall not exceed 0.03 pounds per pound of inorganic flux used.

(g) The Permittee shall melt only clean charge, internal scrap, or customer returns any post-consumer scrap materials in any of the furnaces at this source. This area source is an aluminum die casting facility and an aluminum foundry, and therefore is subject to the requirements of the National Emissions Standards for Hazardous Air Pollutants for Secondary Aluminum Production (40 CFR 63.150, Subpart RRR) only because it operates a thermal chip dryer. No furnace is subject to the requirements of this subpart because the furnaces only melt clean charge, internal scrap, and customer returns.

Compliance with the above limit combined with the PTE of other emission unit, shall limit emissions of any single HAP from the entire source to less than ten (10) tons per twelve (12) month consecutive period and emissions of total HAPs to less than 25 tons per twleve (12) month consecutive period of total HAPs and make the entire source an area source for HAPs.

D.2.3 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the following units shall be limited as follows when operating at the listed process weight rate:

Unit	Process Weight Rate (ton/hr)	PM Emission Limit (lb/hr)
Reverberatory Furnace RF-2 (DC MELT B - #2)	6.25	14
Reverberatory Furnace RF-11 (DC MELT A - #11)	5.1	12.21
Reverberatory Furnace RF-12 (DC MELT A - #12)	10.0	19.18
Dry Hearth Furnace Number 10	12.5	22.27
Dry Hearth Furnace DC No. 9	22.5	33.0
Line 1 Melter	5.0	12.05
Line 2 Melter	5.0	12.05
Line 3 Melter	5.0	12.05

The pounds per hour limitations were calculated with the following equation:
Interpolation of the data for the process weight rate up to 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.2.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan is required for these facilities and their control devices. Section B- Preventive Maintenance Plan contains the Permittee's obligation with regard to Preventive Maintenance Plans.

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

D.2.5 Record Keeping Requirements

(a) To document compliance with Condition D.2.1(a), the Permittee shall keep monthly records of the amount of metal melted in all of the furnaces combined.

(b) To document compliance with Condition D.2.2(a), the Permittee shall keep monthly records of the amount of organic flux used in all of the furnaces combined.

(c) To document compliance with Condition D.2.2(a), the Permittee shall keep monthly records of the amount of inorganic flux used in all of the furnaces combined.

(d) To document compliance with Condition D.2.2(g), the Permittee shall keep records of the type of scrap used in the furnaces. The records shall be sufficient to demonstrate compliance with the requirements of D.2.2(g).

(e) All records shall be maintained. Section C- General Record Keeping Requirements contains the Permittee;s obligation with regard to record keeping.

D.2.6 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.2.1(a) and D.2.2(a) shall be submitted to the address in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a ”responsible official” as defined by 326 IAC 2-7-1(34).

SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

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

(b) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment [326 IAC 6-3-2].

(c) Grinding and machining operations [326 IAC 6-3-2].

(d) Emission units with PM and PM_{10} emissions less than five (5) tons per year, SO_2, NOx, and VOC emissions less than ten (10) tons per year, CO emissions less than twenty-five (25) tons per year, lead emissions less than two-tenths (0.2) tons per year, single HAP emissions less than one (1) ton per year, and combination of HAPs emissions less than two and a half (2.5) tons per year [326 IAC 6-3-2]:

(1) Chip and crushed material storage piles [326 IAC 6-4];

(2) Spinning Nozzle Injection Flux (SNIF) units [326 IAC 6-3-2];

(3) Refractory powder mixing stations [326 IAC 6-3-2];

(4) Maintenance cutoff saws [326 IAC 6-3-2];

(5) Ladle weigh stations [326 IAC 6-3-2];

(6) Die cast machines and associated small holding furnaces [326 IAC 6-3-2];

(7) Maintenance paint spray and mold ladle coating booths [326 IAC 6-3-2]

(8) Covered and underground conveyors [326 IAC 6-3-2];

(9) Chip feed hoppers [326 IAC 6-3-2]; and

(10) EDM carbon etchers, tool sharpening, abrasive cleaning, and small sand blasters. [326 IAC 6-3-2]

(11) Pre-machining operations controlled by a mist collector.

(e) Combustion related activities, including natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour.

(1) One (1) natural gas-fired administration building boiler, with a nominal capacity of 8.4 MMBtu/hr, manufactured in 1952 [326 IAC 6-2-3]

(f) Activities associated with emergencies, including the following:

(1) Emergency generators as follows:

(a) Diesel generators not exceeding one thousand six hundred (1,600) horsepower.

(2) Stationary fire pump engines.

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

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

D.3.1 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), the Permittee shall:

(a) Equip the cleaner with a cover;

(b) Equip the cleaner with a facility for draining cleaned parts;

(c) Close the degreaser cover whenever parts are not being handled in the cleaner;

(d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;

(e) Provide a permanent, conspicuous label summarizing the operation requirements;

(f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

D.3.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-5]

(a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the Permittee of a cold cleaner degreaser facility shall ensure that the following control equipment requirements are met:

(1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:

(A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F));

(B) The solvent is agitated; or

(C) The solvent is heated.

(2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury) or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.

(3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).

(4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.

(5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury) or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):

(A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.

(B) A water cover when solvent is used is insoluble in, and heavier than, water.

(C) Other systems of demonstrated equivalent control such as a refrigerated chiller of carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.

(b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility shall ensure that the following operating requirements are met:

(1) Close the cover whenever articles are not being handled in the degreaser.

(2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.

(3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

D.3.3 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from each of the particulate emitting facilities listed in this section shall not exceed the allowable particulate emission rate based on the following equation:

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

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

SECTION D.4 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Semi-Permanent Mold (SPM) Lines

Three (3) Semi-Permanent Mold (SPM) Lines consisting of pouring, cooling, and extraction, identified as SPM Line 1, SPM Line 2, and SPM Line 3, approved for construction in 2010, each with a nominal capacity of 60 molds per hour using 1.6 tons of molten aluminum and 2 tons of core sand per hour, with emissions from each controlled by a baghouse.

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

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

D.4.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the following units shall be limited as follows when operating at the listed process weight rate:

Unit	Process Weight Rate (ton/hr)	PM Emission Limit (lb/hr)
SPM Line 1	3.6	9.67
SPM Line 2	3.6	9.67
SPM Line 3	3.6	9.67

The pounds per hour limitations were calculated with the following equation:
Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

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

SECTION D.5 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(a) Three (3) core sand silos with sand handling equipment, identified collectively as Sand Handling, approved for construction in 2010, each with a capacity of 60 tons, with emissions from all controlled by a baghouse.

(b) Two (2) core sand mixers, identified as Sand Mix 1 and Sand Mix 2, approved for construction in 2010, with a nominal capacity of 22.5 tons per hour, each, with one unit operating and one unit as a backup, with emissions from each controlled by baghouse.

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

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

D.5.1 PSD Minor Limit [326 IAC 2-2]

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

(a) The PM emissions from the sand mixing and handling operations (Sand Mix 1, Sand Mix 2, and Sand Handling) shall not exceed 0.21 pounds per ton of sand.

(b) Sand throughput to the sand mixing and handling operation (Sand Mix 1, Sand Mix 2, and Sand Handling) shall not exceed 52560 tons of sand per twelve(12) month consecutive period.

Compliance with the above limit combined with Conditions D.2.1, D.5.1, D.7.1, and the PTE of other emiission unit, shall limit PM from the entire source to less than 250 tons per twelve (12) month consecutive period and render 326 IAC 2-2 not applicable to the entire source.

D.5.2 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the following units shall be limited as follows when operating at the listed process weight rate:

Unit	Process Weight Rate (ton/hr)	PM Emission Limit (lb/hr)
Sand Mix 1	5.94	13.53
Sand Mix 2		
Sand Handling		

The pounds per hour limitations were calculated with the following equation:
Interpolation of the data for the process weight rate up to 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.5.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan is required for these facilities and its control devices. Section B-Preventive Maintenance Plan contains the Permittee's obligation with regard to Preventive Maintenance Plans.

Compliance Determination Requirements

D.5.4 Control Device Operation [326 IAC 2-7-6]

(a) In order to comply with Conditions D.5.1 and D.5.2, the baghouse associated with the sand mixing and handling operation shall be in operation and controlling emissions from the associated sand mixing and handling operations at all times the associated sand mixing and handling operation is in operation.

(b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify 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.

D.5.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

In order to demonstrate compliance with Condition D.5.1, the Permittee shall perform PM testing for the baghouses within one hundred and eighty (180) days of start-up of the sand mixing and handling operation. This testing shall be conducted utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Section C - Performance Testing contains the Permittee's obligation with regard to performance testing.

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

D.5.6 Visible Emissions Notations

(a) Daily visible emission notations of the sand mixing and handling stack exhaust shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

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

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

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

(e) The Compliance Response Plan, or its equivalent (e.g., Operation, Maintenance and Monitoring (OM&M)) for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response shall be considered a deviation from this permit. Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports contains the Permittee's obligation with regard to compliance response plans.

D.5.7 Parametric Monitoring

(a) The Permittee shall record the pressure drop across the sand mixing and handling baghouses at least once per day when the sand mixing and handling operation is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 0.5 to 7.0 inches of water, the Permittee shall take reasonable response steps. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit. Section C- Compliance Response Plan- Preparation, Implementation, Records, and Reports contains the Permitte's obligation with regard to response steps.

(b) The instruments used for determining the pressure drop shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be validated at least once per year or as recommended by the manufacturer. The validations shall not be completed in consecutive months..

D.5.8 Broken or Failed Bag Detection

(a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

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

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

D.5.9 Record Keeping Requirements

(a) To document compliance with Condition D.5.1(b) – PSD Minor Limit, the Permittee shall maintain records of the monthly sand throughput to the sand mixing and handling operations.

(b) To document compliance with Condition D.5.6 - Visible Emission Notations, the Permittee shall maintain daily records of the visible emission notations of the sand mixing and handling operation stack exhaust. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of a visible emission notation (e.g. the process did not operate that day).

(c) In order to document compliance with Condition D.5.7 - Parametric Monitoring, the Permittee shall maintain the daily records of the pressure drop across the baghouses controlling the sand mixing and handling operation. 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) All records shall be maintained. Section C- General Record Keeping requirements contains the Permittee's obligation with regard to response steps.

D.5.10 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.5.1(b) shall be submitted to the address in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a ”responsible official” as defined by 326 IAC 2-7-1(34).

SECTION D.6 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Five (5) epoxy acrylic core machines, identified as Core Make 1 through 5, approved for construction in 2010, each with a nominal capacity of 2.64 tons of cores per hour with 1.3% resin content, each using approximately 16 pounds per ton of sulfur dioxide catalyst, with four operating and one unit as a backup, with emissions from all controlled by a caustic scrubber.

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

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

D.6.1 PSD Minor Limit [326 IAC 2-2]

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

(a) The SO_2 emissions from the core machines (Core Make 1 through 5) shall not exceed 4.35 pounds per ton of core.

(b) Core throughput to the core make machines (Core Make 1 through 5) shall not exceed 52560 tons per twelve (12) month consecutive period.

Compliance with the above limit combined with all other limits and the potential to emit SO2 from all unlimited other emission units at the source shall limit SO2 from the entire source to less than 250 tons per twelve (12) month consecutive period and render 326 IAC 2-2 not applicable to the entire source.

D.6.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan is required for these facilities and their control devices. Section B- Preventive Maintenance Plan contains the Permittee's obligation with regard to Preventive Maintenance Plans.

Compliance Determination Requirements

D.6.3 Control Device Operation [326 IAC 2-2]

In order to comply with Conditions D.6.1, the scrubber associated with the core make machines shall be in operation and controlling emissions from the core make machines at all times any of the core make machines is in operation.

D.6.4 Testing Requirements [326 IAC 2-1.1-11]

In order to demonstrate compliance with Condition D.6.1, the Permittee shall perform SO2 testing for the scrubber within one hundred and eighty (180) days of start-up of the core make machines. This testing shall be conducted utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of the last valid compliance demonstration. Section C - Performance Testing contains the Permittee's obligation with regard to performance testing.

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

D.6.5 Parametric Monitoring

(a) Permittee shall monitor the liquor flow rate of the scrubber at least once per day when any of the core make machines is in operation. When for any one reading, the scrubber flow rate is less than 250 gallons per minute, or a value established during the latest

stack test, the Permittee shall take reasonable response steps. Section C – Compliance Response Plan Exceedances contains the Permittee's obligation with regard to response steps. A flow rate that is less than the 250 gallons per minute, or a value established during the latest stack test, is not a deviation from this permit. Failure to take response steps in shall be considered a deviation from this permit.

The instrument used for determining the scrubber liquor flow rate shall be subject to approval by IDEM, OAQ, and shall be validated at least once per year or as recommended by the manufacturer. The validations shall not be completed in consecutive months. Section C -Instrument Specifications contains the Permittee's obligation with regard to instrument specifications.

(b) The Permittee shall monitor the pH of the scrubber's liquor at least once per day when any of the core make machines are in operation. When for any one reading, the pH is less than 9, the Permittee shall take reasonable response steps. Section C – Compliance Response Plan contains the Permittee's obligation with regard to response steps. A pH that is less than 9, is not a deviation from this permit. Failure to take response steps in shall be considered a deviation from this permit.

The instrument used for determining the scrubber liquor pH shall be subject to approval by IDEM, OAQ, and shall be validated at least once every six (6) months or as recommended by the manufacturer. Section C -Instrument Specifications contains the Permittee's obligation with regard to instrument specifications.

D.6.6 Scrubber Failure Detection

In the event that scrubber failure has been observed, the failed scrubber and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B – Emergency Provisions).

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

D.6.7 Record Keeping Requirements

(a) To document compliance with Condition D.6.1(b) – PSD Minor Limit, the Permittee shall maintain records of the monthly core throughput to the core make machines.

(b) To document compliance with Condition D.6.5(a), the Permittee shall maintain daily records of the liquor flow rate of the scrubber. The Permittee shall include in its daily record when a flow rate is not taken and the reason for the lack of a flow rate (e.g. the process did not operate that day).

(c) In order to document compliance with Condition D.6.5(b), the Permittee shall maintain the daily records of the pH of the liquor flow of the scrubber. The Permittee shall include in its daily record when a pH reading is not taken and the reason for the lack of a pH (e.g. the process did not operate that day).

D.6.8 Reporting Requirements

(a) A quarterly summary of the information to document compliance with Condition D.6.1(b) shall be submitted to the address in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.7 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:
(units approved for construction in SSM 093-29425-00007)

One (1) natural gas-fired thermal sand reclamation system, identified as Sand Reclaim, with a nominal capacity of 6.0 tons of sand per hour and a maximum heat input of 6.0 MMBtu/hr, with emissions controlled by a baghouse. [An affected facility under NSPS UUU]

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

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

D.7.1 PSD Minor Limit [326 IAC 2-2]

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

(a) The PM emissions from Sand Reclaim shall not exceed 0.38 pounds per ton of sand.

(b) The VOC emissions from Sand Reclaim shall not exceed 0.94 pounds per ton of sand.

(c) The sand throughput to the sand reclamation operation (Sand Reclaim) shall not exceed 52560 tons per twelve (12) month consecutive period.

Compliance with the above limit combined with Conditions D.2.1, D.4.1, D.5.1, D.7.1, and the PTE of other emission unit, shall limit PM and VOC from the entire source to less than 250 tons per twelve (12) month consecutive period and render 326 IAC 2-2 not applicable to the entire source and shall limit VOC from the sand reclamation system to less than twenty five (25) tons per twelve (12) month consecutive period and render 326 IAC 8-1-6 not applicable to the sand reclamation system.

D.7.2 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the following units shall be limited as follows when operating at the listed process weight rate:

Unit	Process Weight Rate (ton/hr)	PM Emission Limit (lb/hr)
Sand Reclaim	6	13.61

The pounds per hour limitations were calculated with the following equation:
Interpolation of the data for the process weight rate up to 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.7.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan is required for these facilities and their control devices. Section B-Preventive Maintenance Plan contains the Permittee's obligation with regard to Preventive Maintenance Plans.

Compliance Determination Requirements

D.7.4 Control Device Operation [326 IAC 6-3-2]

(a) In order to comply with Condition D.7.1, the baghouse associated with the sand reclamation operation shall be in operation and controlling emissions from the sand reclamation operations at all times the sand reclamation operation is in operation.

(b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify 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.

D.7.5 Testing Requirements [326 IAC 2-1.1-11]

(a) In order to demonstrate compliance with Condition D.7.1(a), the Permittee shall perform PM testing for the baghouse within one hundred and eighty (180) days of start-up of the sand reclamation operation. This testing shall be conducted utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Section C - Performance Testing contains the Permittee's obligation with regard to performance testing.

(b) In order to demonstrate compliance with Condition D.7.1(b), the Permittee shall perform VOC testing for the sand reclamation operation (Sand Reclaim) within one hundred eighty (180) days of start-up of the sand reclamation operation. This testing shall be conducted utilizing methods as approved by the Commissioner. Section C - Performance Testing contains the Permittee's obligation with regard to performance testing.

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

D.7.6 Visible Emissions Notations

(a) Daily visible emission notations of the sand reclamation stack exhaust shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

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

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

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

(e) The Compliance Response Plan, or its equivalent (e.g., Operation, Maintenance and Monitoring (OM&M)) for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response shall be considered a deviation from this permit. Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports contains the Permittee's obligation with regard to compliance response plans.

D.7.7 Parametric Monitoring

(a) The Permittee shall record the pressure drop across the sand reclamation baghouse at least once per day when the sand reclamation operation is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 0.5 to 7.0 inches of water, the Permittee shall take reasonable response steps. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit. Section C- Compliance Response Plan- Preparation, Implementation, Records, and Reports contains the Permittee's obligation with regard to response steps.

(b) The instruments used for determining the pressure drop shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be validated at least once every six (6) months.

D.7.8 Broken or Failed Bag Detection

(a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

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

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

D.7.9 Record Keeping Requirements

(a) To document compliance with Condition D.7.1(c) – PSD Minor Limit, the Permittee shall maintain monthly records of the sand throughput to the sand reclamation operation.

(b) To document compliance with Condition D.7.6 - Visible Emission Notations, the Permittee shall maintain daily records of the visible emission notations of the sand reclamation operation stack exhaust. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of a visible emission notation (e.g. the process did not operate that day).

(c) In order to document compliance with Condition D.7.7 - Parametric Monitoring, the Permittee shall maintain the daily records of the pressure drop across the baghouse controlling the sand reclamation operation. 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) All records shall be maintained. Section C- General Record Keeping requirements contains the Permittee's obligation with regard to response steps.

D.7.10 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.7.1(c) shall be submitted to the address in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a ”responsible official” as defined by 326 IAC 2-7-1(34).

SECTION E.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Chip Processing

One (1) natural gas-fired aluminum thermal chip dryer, identified as CHIP-2, with a maximum capacity of 7.60 tons of scrap aluminum chips per hour, and a nominal heat input capacity of 6.83 million Btu per hour for the chip dryer drum, using an afterburner and a baghouse, identified as AB-1, as control, constructed in 1974, and exhausting to stack 10.

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

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

E.1.1 National Emissions Standards for Hazardous Air Pollutants Under 40 CFR Part 63 [326 IAC 20-1] [40 CFR Part 63, Subpart A]

(a) The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-1-1, apply to the natural gas-fired aluminum thermal chip dryer, identified as CHIP-2, except when otherwise specified in 40 CFR Part 63, Subpart RRR. These requirements became applicable to the aluminum chip dryer (CHIP-2) on March 24, 2003. This facility is an area source under Clean Air Act Section 112. Therefore, only the area source requirements of Subpart RRR apply to this facility.

(b) Pursuant to 40 CFR 63.7, the Permittee shall submit all of the required notifications and reports to:
Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

E.1.2 National Emissions Standards for Hazardous Air Pollutants for Secondary Aluminum Production [326 IAC 20-70-1] [40 CFR Part 63, Subpart RRR]]

Pursuant to 40 CFR Part 63, Subpart RRR, the Permittee shall comply with the applicable provisions of 40 CFR Part 63, Subpart RRR (included as Attachment A), which are incorporated by reference as 326 IAC 20-70, for the natural gas-fired aluminum thermal chip dryer, identified as CHIP-2.

At the time of permit issuance, the following provisions were identified as applicable.

(1) 40 CFR 63.1500(a), (c)(1), (f);
(2) 40CFR 63.1503;
(3) 40 CFR 63.1505(a),(c)(2);
(4) 40 CFR 63.1506(a)(1),(c),(d), and (f); (Comment: (a)(2) and (b) do not apply)
(5) 40 CFR 63.1510(a),(b),(d),(e),(g) and (k);
(6) 40 CFR 63.1511(a), (b) and (c) ; (Comment: Monitoring and operating parameter values already established)
(7) 40 CFR 63.1512(b),(k),(m);
(8) 40 CFR 63.1516(a),(b), and (c); and
(9) 40 CFR 63.1517(a),(b)(2),(b)(6),(b)(7),(b)(9),(b)(14),(b)(15),(b)(16); and
(10) 40 CFR 63 1518.

Pursuant to 40 CFR 63.1510(e), the Permittee shall install, calibrate, operate, and maintain a device to measure and record the total weight of dry chips processed through the natural gas-fired aluminum chip dryer for each operating cycle or time period used in the performance test consistent with US EPA's April 15, 2003 approval of alternative monitoring for the thermal chip dryer.

SECTION E.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(f) Activities associated with emergencies, including the following:

(1) Emergency generators as follows:

(a) Diesel generators not exceeding one thousand six hundred (1,600) horsepower.

(2) Stationary fire pump engines.

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

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

E.2.1 National Emissions Standards for Hazardous Air Pollutants Under 40 CFR Part 63 [326 IAC 20-1] [40 CFR Part 63, Subpart A]

The provisions of 40 CFR 63, Subpart A - General Provisions apply to the facility described in this section except when otherwise specified in 40 CFR 63, Subpart ZZZZ.

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

By March 3. 2013, the Permitee shall comply with the following provisions of 40 CFR 63, Subpart ZZZZ as specified is Attachment B of this permit:

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

SECTION E.3 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

SPM Melting Operations

(g) Three (3) natural gas-fired stack melting furnaces, identified as Line 1 Stack Melter, Line 2 Stack Melter, and Line 3 Stack Melter, approved for construction in 2010, each with a nominal capacity of five (5) tons of metal per hour, 0.1955 pounds of inorganic flux per ton of metal, and 0.1019 pounds of organic flux per ton of metal, and each with a heat input capacity of 11.1 MMBtu/hr with emissions from each controlled by a baghouse.

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

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

E.3.1 National Emissions Standards for Hazardous Air Pollutants Under 40 CFR Part 63 [326 IAC 20-1] [40 CFR Part 63, Subpart A]

The provisions of 40 CFR 63, Subpart A - General Provisions apply to the facility described in this section except when otherwise specified in 40 CFR 63, Subpart ZZZZZZ.

E.3.2 National Emissions Standards for Hazardous Air Pollutants for Area Source Standards for Aluminum, Copper, and other Non-ferrous Foundries [40 CFR Part 63, Subpart ZZZZZZ]]

The Permittee shall comply with the following provisions of 40 CFR 63, Subpart ZZZZZZ as specified is Attachment C of this permit:

(1) 40 CFR 63.11544(a)(1)
(2) 40 CFR 63.11544(a)(4)(i)
(3) 40 CFR 63.11544(b)
(4) 40 CFR 63.11544(c)
(5) 40 CFR 63.11545(a)
(6) 40 CFR 63.11550(a)
(7) 40 CFR 63.11552(a)
(8) 40 CFR 63.11553(a)
(9) 40 CFR 63.11553(b)
(10) 40 CFR 63.11553(c)(1)
(11) 40 CFR 63.11553(c)(2)
(12) 40 CFR 63.11553(c)(3)
(13) 40 CFR 63.11553(d)
(14) 40 CFR 63.11553(e)
(15) 40 CFR 63.11555
(16) 40 CFR 63.11556
(17) 40 CFR 63.11557

SECTION E.4 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(h) One (1) natural gas-fired thermal sand reclamation system, identified as Sand Reclaim, with a nominal capacity of 6.0 tons of sand per hour and a maximum heat input of 6.0 MMBtu/hr, with emissions controlled by a baghouse. [An affected facility under NSPS UUU].

(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

E.4.1 General Provisions Relating to New Source Performance Standards [326 IAC 12-1] [40 CFR Part 60, Subpart A]

(a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60 Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1 for the sand reclamation operation, identified as Sand Reclaim except as otherwise specified in 40 CFR Part 60, Subpart UUU.

(b) Pursuant to 40 CFR 60.10, the Permittee shall submit all required notifications and reports to:

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

E.4.2 Standards of Perfomance for Calciners and Dryers in Mineral Processing Industries [40 CFR Part 60, Subpart UUU]]

The Permittee shall comply with the following provisions of 40 CFR 60, Subpart UUU as specified is Attachment D of this permit:

(a) 40 CFR 60.730(a)
(b) 40 CFR 60.730(c)
(c) 40 CFR 60.731
(d) 40 CFR 60.732
(e) 40 CFR 60.735(a)
(f) 40 CFR 60.735(c)(1), (2)
(g) 40 CFR 60.735(d)
(h) 40 CFR 60.736(a), (b)
(i) 40 CFR 60.737

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
PART 70 OPERATING PERMIT
CERTIFICATION

Source Name: General Motors LLC
Source Address: 105 GM Drive, Bedford, Indiana 47421
Part 70 Permit No.: T 093-26058-00007

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

Please check what document is being certified:

☐ Annual Compliance Certification Letter

☐ Test Result (specify)

☐ Report (specify)

☐ Notification (specify)

☐ Affidavit (specify)

☐ Other (specify)

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
Signature:
Printed Name:
Title/Position:
Phone:
Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

COMPLIANCE AND ENFORCEMENT BRANCH
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
Phone: (317) 233-0178
Fax: (317) 233-6865

PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT

Source Name: General Motors LLC
Source Address: 105 GM Drive, Bedford, Indiana 47421
Part 70 Permit No.: T 093-26058-00007

This form consists of 2 pages **Page 1 of 2**

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

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

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

If any of the following are not applicable, mark N/A **Page 2 of 2**

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N
Type of Pollutants Emitted: TSP, PM-10, SO_2, VOC, NO_X, CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by:_____

Title / Position: _____

Date:_____

Phone: _____

A certification is not required for this report.

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

Part 70 Quarterly Report

Source Name: General Motors LLC
Source Address: 105 GM Drive, Bedford, Indiana 47421
Part 70 Permit No.: T 093-26058-00007
Facility: All furnaces combined
Parameter: Amount of metal used
Limit: Less than 175,000 tons of metal per twelve (12) consecutive month period with compliance determined at the end of each month.

QUARTER: 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:

Form Completed by: _____
Title / Position: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

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

Part 70 Quarterly Report

Source Name: General Motors LLC
Source Address: 105 GM Drive, Bedford, Indiana 47421
Part 70 Permit No.: T 093-26058-00007
Facility: All furnaces combined
Parameter: Amount of flux used
Limit: Less than 34,909 pounds of organic flux per twelve (12) consecutive month period with compliance determined at the end of each month, where 100 pounds of inorganic flux is equivalent to 1 pound of organic flux.

QUARTER: 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:

Form Completed by: _____
Title / Position: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

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

Part 70 Quarterly Report

Source Name: General Motors LLC
Source Address: 105 GM Drive, Bedford, Indiana 47421
Part 70 Permit No.: T 093-26058-00007
Facility: sand mixing and handling operation
Parameter: Amount of sand processed
Limit: Less than 52560 tons of metal per twelve (12) consecutive month period with compliance determined at the end of each month.

QUARTER: 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:

Form Completed by: _____
Title / Position: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

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

Part 70 Quarterly Report

Source Name: General Motors LLC
Source Address: 105 GM Drive, Bedford, Indiana 47421
Part 70 Permit No.: T 093-26058-00007
Facility: Core Make Machines
Parameter: Amount of core processed
Limit: Less than 52560 tons of sand per twelve (12) consecutive month period with compliance determined at the end of each month.

QUARTER: 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:

Form Completed by: _____
Title / Position: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

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

Part 70 Quarterly Report

Source Name: General Motors LLC
Source Address: 105 GM Drive, Bedford, Indiana 47421
Part 70 Permit No.: T 093-26058-00007
Facility: Sand reclamation operation
Parameter: Amount of sand processed
Limit: Less than 52560 tons of metal per twelve (12) consecutive month period with compliance determined at the end of each month.

QUARTER: 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:

Form Completed by: _____
Title / Position: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

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

Part 70 Quarterly Report

Source Name: General Motors LLC
Source Address: 105 GM Drive, Bedford, Indiana 47421
Part 70 Permit No.: T 093-26058-00007
Facility: Thermal Chip dryer (CHIP-2)
Parameter: Amount of metal processed
Limit: Less than 66576 tons of metal per twelve (12) consecutive month period with compliance determined at the end of each month.

QUARTER: 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:

Form Completed by: _____
Title / Position: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

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

Source Name: General Motors LLC
Source Address: 105 GM Drive, Bedford, Indiana 47421
Part 70 Permit No.: T 093-26058-00007

Months: _____to _____ Year: _____

This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".	
☐ 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: _____

Attach a signed certification to complete this report.

Part 70 Operating Permit Renewal
OFFICE OF AIR QUALITY

General Motors LLC
105 GM Drive
Bedford, IN 47421

Attachment A

Title 40: Protection of Environment

Part 63 - National Emission Standards for Hazardous Air Pollutants

Subpart RRR—Secondary Aluminum Production

T093-26058-00007

Subpart RRR—National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production

Source: 65 FR 15710, Mar. 23, 2000, unless otherwise noted.

General

§ 63.1500 Applicability.

(a) The requirements of this subpart apply to the owner or operator of each secondary aluminum production facility as defined in §63.1503.

(b) The requirements of this subpart apply to the following affected sources, located at a secondary aluminum production facility that is a major source of hazardous air pollutants (HAPs) as defined in §63.2:

(1) Each new and existing aluminum scrap shredder;

(2) Each new and existing thermal chip dryer;

(3) Each new and existing scrap dryer/delacquering kiln/decoating kiln;

(4) Each new and existing group 2 furnace;

(5) Each new and existing sweat furnace;

(6) Each new and existing dross-only furnace;

(7) Each new and existing rotary dross cooler; and

(8) Each new and existing secondary aluminum processing unit.

(c) The requirements of this subpart pertaining to dioxin and furan (D/F) emissions and associated operating, monitoring, reporting and recordkeeping requirements apply to the following affected sources, located at a secondary aluminum production facility that is an area source of HAPs as defined in §63.2:

(1) Each new and existing thermal chip dryer;

(2) Each new and existing scrap dryer/delacquering kiln/decoating kiln;

(3) Each new and existing sweat furnace;

(4) Each new and existing secondary aluminum processing unit, containing one or more group 1 furnace emission units processing other than clean charge.

(d) The requirements of this subpart do not apply to facilities and equipment used for research and development that are not used to produce a saleable product.

(e) 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 71, provided you are not required to obtain a permit under 40 CFR 70.3(a) or 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.

(f) An aluminum die casting facility, aluminum foundry, or aluminum extrusion facility shall be considered to be an area source if it does not emit, or have the potential to emit considering controls, 10 tons per year or more of any single listed HAP or 25 tons per year of any combination of listed HAP from all emission sources which are located in a contiguous area and under common control, without regard to whether or not such sources are regulated under this subpart or any other subpart. In the case of an aluminum die casting facility, aluminum foundry, or aluminum extrusion facility which is an area source and is subject to regulation under this subpart only because it operates a thermal chip dryer, no furnace operated by such a facility shall be deemed to be subject to the requirements of this subpart if it melts only clean charge, internal scrap, or customer returns.

[65 FR 15710, Mar. 23, 2000, as amended at 67 FR 79814, Dec. 30, 2002; 70 FR 75346, Dec. 19, 2005]

§ 63.1501 Dates.

(a) The owner or operator of an existing affected source must comply with the requirements of this subpart by March 24, 2003.

(b) Except as provided in paragraph (c) of this section, the owner or operator of a new affected source that commences construction or reconstruction after February 11, 1999 must comply with the requirements of this subpart by March 24, 2000 or upon startup, whichever is later.

(c) The owner or operator of any affected source which is constructed or reconstructed at any existing aluminum die casting facility, aluminum foundry, or aluminum extrusion facility which otherwise meets the applicability criteria set forth in §63.1500 must comply with the requirements of this subpart by March 24, 2003 or upon startup, whichever is later.

[67 FR 59791, Sept. 24, 2002]

§ 63.1502 Incorporation by reference.

(a) The following material is incorporated by reference in the corresponding sections noted. The incorporation by reference (IBR) of certain publications listed in the rule will be approved by the Director of the Office of the Federal Register as of the date of publication of the final rule in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. This material is incorporated as it exists on the date of approval:

(1) Chapters 3 and 5 of “Industrial Ventilation: A Manual of Recommended Practice,” American Conference of Governmental Industrial Hygienists, (23rd edition, 1998), IBR approved for §63.1506(c), and

(2) “Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-Dioxins and -Dibenzofurans (CDDs and CDFs) and 1989 Update” (EPA/625/3–89/016).

(b) The material incorporated by reference is available for inspection at the National Archives and Records Administration (NARA); and at the Air and Radiation Docket and Information Center, U.S. EPA, 1200 Pennsylvania Ave., NW., Washington, DC. For information on the availability of this material at NARA, call 202–741–6030, or go to: *http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.* The material is also available for purchase from the following addresses:

(1) Customer Service Department, American Conference of Governmental Industrial Hygienists (ACGIH), 1330 Kemper Meadow Drive, Cincinnati, OH 45240–1634, telephone number (513) 742–2020; and

(2) The National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, VA, NTIS no. PB 90–145756.

§ 63.1503 Definitions.

Terms used in this subpart are defined in the Clean Air Act as amended (CAA), in §63.2, or in this section as follows:

Add-on air pollution control device means equipment installed on a process vent that reduces the quantity of a pollutant that is emitted to the air.

Afterburner means an air pollution control device that uses controlled flame combustion to convert combustible materials to noncombustible gases; also known as an incinerator or a thermal oxidizer.

Aluminum scrap means fragments of aluminum stock removed during manufacturing (*i.e.,* machining), manufactured aluminum articles or parts rejected or discarded and useful only as material for reprocessing, and waste and discarded material made of aluminum.

Aluminum scrap shredder means a unit that crushes, grinds, or breaks aluminum scrap into a more uniform size prior to processing or charging to a *scrap dryer/delacquering kiln/decoating kiln,* or furnace. A bale breaker is not an *aluminum scrap shredder.*

Bag leak detection system means an instrument that is capable of monitoring particulate matter loadings in the exhaust of a fabric filter (*i.e.,* baghouse) in order to detect bag failures. A *bag leak detection system* includes, but is not limited to, an instrument that operates on triboelectric, light scattering, light transmittance, or other effect to monitor relative particulate matter loadings.

Chips means small, uniformly-sized, unpainted pieces of aluminum scrap, typically below 11/4inches in any dimension, primarily generated by turning, milling, boring, and machining of aluminum parts.

Clean charge means furnace charge materials, including molten aluminum; T-bar; sow; ingot; billet; pig; alloying elements; aluminum scrap known by the owner or operator to be entirely free of paints, coatings, and lubricants; uncoated/unpainted aluminum chips that have been thermally dried or treated by a centrifugal cleaner; aluminum scrap dried at 343 °C (650 °F) or higher; aluminum scrap delacquered/decoated at 482 °C (900 °F) or higher, and runaround scrap.

Cover flux means salt added to the surface of molten aluminum in a *group 1* or *group 2 furnace,* without agitation of the molten aluminum, for the purpose of preventing oxidation.

Customer returns means any aluminum product which is returned by a customer to the aluminum company that originally manufactured the product prior to resale of the product or further distribution in commerce, and which contains no paint or other solid coatings (*i.e.,* lacquers).

D/F means dioxins and furans.

Dioxins and furans means tetra-, penta-, hexa-, and octachlorinated dibenzo dioxins and furans.

Dross means the slags and skimmings from aluminum melting and refining operations consisting of fluxing agent(s), impurities, and/or oxidized and non-oxidized aluminum, from scrap aluminum charged into the furnace.

Dross-only furnace means a furnace, typically of rotary barrel design, dedicated to the reclamation of aluminum from dross formed during melting, holding, fluxing, or alloying operations carried out in other process units. Dross and salt flux are the sole feedstocks to this type of furnace.

Emission unit means a *group 1 furnace* or *in-line fluxer* at a *secondary aluminum production facility.*

Fabric filter means an add-on air pollution control device used to capture particulate matter by filtering gas streams through filter media; also known as a baghouse.

Feed/charge means, for a furnace or other process unit that operates in batch mode, the total weight of material (including molten aluminum, T-bar, sow, ingot, etc.) and alloying agents that enter the furnace during an operating cycle. For a furnace or other process unit that operates continuously, *feed/charge* means the weight of material (including molten aluminum, T-bar, sow, ingot, etc.) and alloying agents that enter the process unit within a specified time period (*e.g.,* a time period equal to the performance test period). The *feed/charge* for a dross only furnace includes the total weight of dross and solid flux.

Fluxing means refining of molten aluminum to improve product quality, achieve product specifications, or reduce material loss, including the addition of solvents to remove impurities (solvent flux); and the injection of gases such as chlorine, or chlorine mixtures, to remove magnesium (demagging) or hydrogen bubbles (degassing). *Fluxing* may be performed in the furnace or outside the furnace by an *in-line fluxer.*

Furnace hearth means the combustion zone of a furnace in which the molten metal is contained.

Group 1 furnace means a furnace of any design that melts, holds, or processes aluminum that contains paint, lubricants, coatings, or other foreign materials with or without *reactive fluxing,* or processes *clean charge* with *reactive fluxing.*

Group 2 furnace means a furnace of any design that melts, holds, or processes only *clean charge* and that performs no *fluxing* or performs *fluxing* using only nonreactive, non-HAP-containing/non-HAP-generating gases or agents.

HCl means, for the purposes of this subpart, emissions of hydrogen chloride that serve as a surrogate measure of the total emissions of the HAPs hydrogen chloride, hydrogen fluoride and chlorine.

In-line fluxer means a device exterior to a furnace, located in a transfer line from a furnace, used to refine (flux) molten aluminum; also known as a flux box, degassing box, or demagging box.

Internal scrap means all aluminum scrap regardless of the level of contamination which originates from castings or extrusions produced by an aluminum die casting facility, aluminum foundry, or aluminum extrusion facility, and which remains at all times within the control of the company that produced the castings or extrusions.

Lime means calcium oxide or other alkaline reagent.

Lime-injection means the continuous addition of lime upstream of a *fabric filter.*

Melting/holding furnace means a *group 1 furnace* that processes only *clean charge,* performs melting, holding, and fluxing functions, and does not transfer molten aluminum to or from another furnace except for purposes of alloy changes, off-specification product drains, or maintenance activities.

Operating cycle means for a batch process, the period beginning when the feed material is first charged to the operation and ending when all feed material charged to the operation has been processed. For a batch melting or holding furnace process, *operating cycle* means the period including the charging and melting of scrap aluminum and the fluxing, refining, alloying, and tapping of molten aluminum (the period from tap-to-tap).

PM means, for the purposes of this subpart, emissions of particulate matter that serve as a measure of total particulate emissions and as a surrogate for metal HAPs contained in the particulates, including but not limited to, antimony, arsenic, beryllium, cadmium, chromium, cobalt, lead, manganese, mercury, nickel, and selenium.

Pollution prevention means source reduction as defined under the Pollution Prevention Act of 1990 (*e.g.,* equipment or technology modifications, process or procedure modifications, reformulation or redesign of products, substitution of raw materials, and improvements in housekeeping, maintenance, training, or inventory control), and other practices that reduce or eliminate the creation of pollutants through increased efficiency in the use of raw materials, energy, water, or other resources, or protection of natural resources by conservation.

Reactive fluxing means the use of any gas, liquid, or solid flux (other than cover flux) that results in a HAP emission. Argon and nitrogen are not reactive and do not produce HAP.

Reconstruction means the replacement of components of an affected source or *emission unit* such that the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable new affected source, and it is technologically and economically feasible for the reconstructed source to meet relevant standard(s) established in this subpart. Replacement of the refractory in a furnace is routine maintenance and is not a *reconstruction.* The repair and replacement of *in-line fluxer* components (*e.g.,* rotors/shafts, burner tubes, refractory, warped steel) is considered to be routine maintenance and is not considered a *reconstruction. In-line fluxers* are typically removed to a maintenance/repair area and are replaced with repaired units. The replacement of an existing *in-line fluxer* with a repaired unit is not considered a *reconstruction.*

Residence time means, for an *afterburner,* the duration of time required for gases to pass through the *afterburner* combustion zone. *Residence time* is calculated by dividing the *afterburner* combustion zone volume in cubic feet by the volumetric flow rate of the gas stream in actual cubic feet per second.

Rotary dross cooler means a water-cooled rotary barrel device that accelerates cooling of dross.

Runaround scrap means scrap materials generated on-site by aluminum casting, extruding, rolling, scalping, forging, forming/stamping, cutting, and trimming operations and that do not contain paint or solid coatings. Uncoated/unpainted aluminum chips generated by turning, boring, milling, and similar machining operations may be clean charge if they have been thermally dried or treated by a centrifugal cleaner, but are not considered to be *runaround scrap.*

Scrap dryer/delacquering kiln/decoating kiln means a unit used primarily to remove various organic contaminants such as oil, paint, lacquer, ink, plastic, and/or rubber from *aluminum scrap* (including used beverage containers) prior to melting.

Secondary aluminum processing unit (SAPU). An existing SAPU means all existing *group 1 furnaces* and all existing *in-line fluxers* within a *secondary aluminum production facility.* Each existing *group 1 furnace* or existing *in-line fluxer* is considered an *emission unit* within a *secondary aluminum processing unit.* A new *SAPU* means any combination of individual *group 1 furnaces* and *in-line fluxers* within a *secondary aluminum processing facility* which either were constructed or reconstructed after February 11, 1999, or have been permanently redesignated as new emission units pursuant to §63.1505(k)(6). Each of the *group 1 furnaces* or *in-line fluxers* within a new *SAPU* is considered an *emission unit* within that *secondary aluminum processing unit.*

Secondary aluminum production facility means any establishment using *clean charge, aluminum scrap,* or dross from aluminum production, as the raw material and performing one or more of the following processes: scrap shredding, scrap drying/delacquering/decoating, thermal chip drying, furnace operations (*i.e.,* melting, holding, sweating, refining, fluxing, or alloying), recovery of aluminum from dross, in-line fluxing, or dross cooling. A *secondary aluminum production facility* may be independent or part of a primary aluminum production facility. For purposes of this subpart, aluminum die casting facilities, aluminum foundries, and aluminum extrusion facilities are not considered to be secondary aluminum production facilities if the only materials they melt are *clean charge,* customer returns, or internal scrap, and if they do not operate sweat furnaces, thermal chip dryers, or scrap dryers/delacquering kilns/decoating kilns. The determination of whether a facility is a *secondary aluminum production facility* is only for purposes of this subpart and any regulatory requirements which are derived from the applicability of this subpart, and is separate from any determination which may be made under other environmental laws and regulations,

including whether the same facility is a "secondary metal production facility" as that term is used in 42 U.S.C. §7479(1) and 40 CFR 52.21(b)(1)(i)(A) ("prevention of significant deterioration of air quality").

Sidewell means an open well adjacent to the hearth of a furnace with connecting arches between the hearth and the open well through which molten aluminum is circulated between the hearth, where heat is applied by burners, and the open well, which is used for charging scrap and solid flux or salt to the furnace, injecting fluxing agents, and skimming dross.

Sweat furnace means a furnace used exclusively to reclaim aluminum from scrap that contains substantial quantities of iron by using heat to separate the low-melting point aluminum from the scrap while the higher melting-point iron remains in solid form.

TEQ means the international method of expressing toxicity equivalents for dioxins and furans as defined in "Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-Dioxins and -Dibenzofurans (CDDs and CDFs) and 1989 Update" (EPA–625/3–89–016), available from the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, Virginia 22161, NTIS no. PB 90–145756.

THC means, for the purposes of this subpart, total hydrocarbon emissions that also serve as a surrogate for the emissions of organic HAP compounds.

Thermal chip dryer means a device that uses heat to evaporate oil or oil/water mixtures from unpainted/uncoated aluminum chips. Pre-heating boxes or other dryers which are used solely to remove water from aluminum scrap are not considered to be thermal chip dryers for purposes of this subpart.

Three-day, 24-hour rolling average means daily calculations of the average 24-hour emission rate (lbs/ton of feed/charge), over the 3 most recent consecutive 24-hour periods, for a *secondary aluminum processing unit.*

Total reactive chlorine flux injection rate means the sum of the total weight of chlorine in the gaseous or liquid reactive flux and the total weight of chlorine in the solid reactive chloride flux, divided by the total weight of feed/charge, as determined by the procedure in §63.1512(o).

[65 FR 15710, Mar. 23, 2000, as amended at 67 FR 79814, Dec. 30, 2002; 69 FR 18803, Apr. 9, 2004; 69 FR 53984, Sept. 3, 2004; 70 FR 57517, Oct. 3, 2005]

§ 63.1504 [Reserved]

Emission Standards and Operating Requirements

§ 63.1505 Emission standards for affected sources and emission units.

(a) *Summary.* The owner or operator of a new or existing affected source must comply with each applicable limit in this section. Table 1 to this subpart summarizes the emission standards for each type of source.

(b) *Aluminum scrap shredder.* On and after the compliance date established by §63.1501, the owner or operator of an aluminum scrap shredder at a secondary aluminum production facility that is a major source must not discharge or cause to be discharged to the atmosphere:

(1) Emissions in excess of 0.023 grams (g) of PM per dry standard cubic meter (dscm) (0.010 grain (gr) of PM per dry standard cubic foot (dscf)); and

(2) Visible emissions (VE) in excess of 10 percent opacity from any PM add-on air pollution control device if a continuous opacity monitor (COM) or visible emissions monitoring is chosen as the monitoring option.

(c) *Thermal chip dryer.* On and after the compliance date established by §63.1501, the owner or operator of a thermal chip dryer must not discharge or cause to be discharged to the atmosphere emissions in excess of:

(1) 0.40 kilogram (kg) of THC, as propane, per megagram (Mg) (0.80 lb of THC, as propane, per ton) of feed/charge from a thermal chip dryer at a secondary aluminum production facility that is a major source; and

(2) 2.50 micrograms (μg) of D/F TEQ per Mg (3.5×10^{-5}gr per ton) of feed/charge from a thermal chip dryer at a secondary aluminum production facility that is a major or area source.

(d) *Scrap dryer/delacquering kiln/decoating kiln.* On and after the compliance date established by §63.1501:

(1) The owner or operator of a scrap dryer/delacquering kiln/decoating kiln must not discharge or cause to be discharged to the atmosphere emissions in excess of:

(i) 0.03 kg of THC, as propane, per Mg (0.06 lb of THC, as propane, per ton) of feed/charge from a scrap dryer/delacquering kiln/decoating kiln at a secondary aluminum production facility that is a major source;

(ii) 0.04 kg of PM per Mg (0.08 lb per ton) of feed/charge from a scrap dryer/delacquering kiln/decoating kiln at a secondary aluminum production facility that is a major source;

(iii) 0.25 μg of D/F TEQ per Mg (3.5×10^{-6}gr of D/F TEQ per ton) of feed/charge from a scrap dryer/delacquering kiln/decoating kiln at a secondary aluminum production facility that is a major or area source; and

(iv) 0.40 kg of HCl per Mg (0.80 lb per ton) of feed/charge from a scrap dryer/delacquering kiln/decoating kiln at a secondary aluminum production facility that is a major source.

(2) The owner or operator of a scrap dryer/delacquering kiln/decoating kiln at a secondary aluminum production facility that is a major source must not discharge or cause to be discharged to the atmosphere visible emissions in excess of 10 percent opacity from any PM add-on air pollution control device if a COM is chosen as the monitoring option.

(e) *Scrap dryer/delacquering kiln/decoating kiln: alternative limits.* The owner or operator of a scrap dryer/ delacquering kiln/decoating kiln may choose to comply with the emission limits in this paragraph (e) as an alternative to the limits in paragraph (d) of this section if the scrap dryer/delacquering kiln/decoating kiln is equipped with an afterburner having a design residence time of at least 1 second and the afterburner is operated at a temperature of at least 760 °C (1400 °F) at all times. On and after the compliance date established by §63.1501:

(1) The owner or operator of a scrap dryer/delacquering kiln/decoating kiln must not discharge or cause to be discharged to the atmosphere emissions in excess of:

(i) 0.10 kg of THC, as propane, per Mg (0.20 lb of THC, as propane, per ton) of feed/charge from a scrap dryer/delacquering kiln/decoating kiln at a secondary aluminum production facility that is a major source;

(ii) 0.15 kg of PM per Mg (0.30 lb per ton) of feed/charge from a scrap dryer/delacquering kiln/decoating kiln at a secondary aluminum production facility that is a major source;

(iii) 5.0 μg of D/F TEQ per Mg (7.0×10^{-5}gr of D/F TEQ per ton) of feed/charge from a scrap dryer/delacquering kiln/decoating kiln at a secondary aluminum production facility that is a major or area source; and

(iv) 0.75 kg of HCl per Mg (1.50 lb per ton) of feed/charge from a scrap dryer/delacquering kiln/decoating kiln at a secondary aluminum production facility that is a major source.

(2) The owner or operator of a scrap dryer/ delacquering kiln/decoating kiln at a secondary aluminum production facility that is a major source must not discharge or cause to be discharged to the atmosphere visible emissions in excess of 10 percent opacity from any PM add-on air pollution control device if a COM is chosen as the monitoring option.

(f) *Sweat furnace.* The owner or operator of a sweat furnace shall comply with the emission standard of paragraph (f)(2) of this section.

(1) The owner or operator is not required to conduct a performance test to demonstrate compliance with the emission standard of paragraph (f)(2) of this section, provided that, on and after the compliance date of this rule, the owner or operator operates and maintains an afterburner with a design residence time of 0.8 seconds or greater and an operating temperature of 1600 °F or greater.

(2) On and after the compliance date established by §63.1501, the owner or operator of a sweat furnace at a secondary aluminum production facility that is a major or area source must not discharge or cause to be discharged to the atmosphere emissions in excess of 0.80 nanogram (ng) of D/F TEQ per dscm (3.5×10^{-10}gr per dscf) at 11 percent oxygen (O^2).

(g) *Dross-only furnace.* On and after the compliance date established by §63.1501, the owner or operator of a dross-only furnace at a secondary aluminum production facility that is a major source must not discharge or cause to be discharged to the atmosphere:

(1) Emissions in excess of 0.15 kg of PM per Mg (0.30 lb of PM per ton) of feed/charge.

(2) Visible emissions in excess of 10 percent opacity from any PM add-on air pollution control device if a COM is chosen as the monitoring option.

(h) *Rotary dross cooler.* On and after the compliance date established by §63.1501, the owner or operator of a rotary dross cooler at a secondary aluminum production facility that is a major source must not discharge or cause to be discharged to the atmosphere:

(1) Emissions in excess of 0.09 g of PM per dscm (0.04 gr per dscf).

(2) Visible emissions in excess of 10 percent opacity from any PM add-on air pollution control device if a COM is chosen as the monitoring option.

(i) *Group 1 furnace.* The owner or operator of a group 1 furnace must use the limits in this paragraph to determine the emission standards for a SAPU.

(1) 0.20 kg of PM per Mg (0.40 lb of PM per ton) of feed/charge from a group 1 furnace, that is not a melting/holding furnace processing only clean charge, at a secondary aluminum production facility that is a major source;

(2) 0.40 kg of PM per Mg (0.80 lb of PM per ton) of feed/charge from a group 1 melting/holding furnace processing only clean charge at a secondary aluminum production facility that is a major source;

(3) 15 µg of D/F TEQ per Mg (2.1×10^{-4}gr of D/F TEQ per ton) of feed/charge from a group 1 furnace at a secondary aluminum production facility that is a major or area source. This limit does not apply if the furnace processes only clean charge; and

(4) 0.20 kg of HCl per Mg (0.40 lb of HCl per ton) of feed/charge or, if the furnace is equipped with an add-on air pollution control device, 10 percent of the uncontrolled HCl emissions, by weight, for a group 1 furnace at a secondary aluminum production facility that is a major source.

(5) The owner or operator of a group 1 furnace at a secondary aluminum production facility that is a major source must not discharge or cause to be discharged to the atmosphere visible emissions in excess of 10 percent opacity from any PM add-on air pollution control device if a COM is chosen as the monitoring option.

(6) The owner or operator may determine the emission standards for a SAPU by applying the group 1 furnace limits on the basis of the aluminum production weight in each group 1 furnace, rather than on the basis of feed/charge.

(7) The owner or operator of a sidewell group 1 furnace that conducts reactive fluxing (except for cover flux) in the hearth, or that conducts reactive fluxing in the sidewell at times when the level of molten metal falls below the top of the passage between the sidewell and the hearth, must comply with the emission limits of paragraphs (i)(1) through (4) of this section on the basis of the combined emissions from the sidewell and the hearth.

(j) *In-line fluxer.* Except as provided in paragraph (j)(3) of this section for an in-line fluxer using no reactive flux material, the owner or operator of an in-line fluxer must use the limits in this paragraph to determine the emission standards for a SAPU.

(1) 0.02 kg of HCl per Mg (0.04 lb of HCl per ton) of feed/charge;

(2) 0.005 kg of PM per Mg (0.01 lb of PM per ton) of feed/charge.

(3) The emission limits in paragraphs (j)(1) and (j)(2) of this section do not apply to an in-line fluxer that uses no reactive flux materials.

(4) The owner or operator of an in-line fluxer at a secondary aluminum production facility that is a major source must not discharge or cause to be discharged to the atmosphere visible emissions in excess of 10 percent opacity from any PM add-on air pollution control device used to control emissions from the in-line fluxer, if a COM is chosen as the monitoring option.

(5) The owner or operator may determine the emission standards for a SAPU by applying the in-line fluxer limits on the basis of the aluminum production weight in each in-line fluxer, rather than on the basis of feed/charge.

(k) *Secondary aluminum processing unit.* On and after the compliance date established by §63.1501, the owner or operator must comply with the emission limits calculated using the equations for PM and HCl in paragraphs (k)(1) and (2) of this section for each secondary aluminum processing unit at a secondary aluminum production facility that is a major source. The owner or operator must comply with the emission limit calculated using the equation for D/F in paragraph (k)(3) of this section for each secondary aluminum processing unit at a secondary aluminum production facility that is a major or area source.

(1) The owner or operator must not discharge or allow to be discharged to the atmosphere any 3-day, 24-hour rolling average emissions of PM in excess of:

$$L_{C_{PM}} = \frac{\sum_{i=1}^{n}\left(L_{ti_{PM}} \times T_{ti}\right)}{\sum_{i=1}^{n}\left(T_{ti}\right)} \qquad (Eq.\ 1)$$

Where,

L_{tiPM}= The PM emission limit for individual emission unit i in paragraph (i)(1) and (2) of this section for a group 1 furnace or in paragraph (j)(2) of this section for an in-line fluxer;

T_{ti}= The feed/charge rate for individual emission unit I; and

L_{cPM}= The PM emission limit for the secondary aluminum processing unit.

Note: In-line fluxers using no reactive flux materials cannot be included in this calculation since they are not subject to the PM limit.

(2) The owner or operator must not discharge or allow to be discharged to the atmosphere any 3-day, 24-hour rolling average emissions of HCl in excess of:

$$L_{c_{HCl}} = \frac{\sum_{i=1}^{n}\left(L_{ti_{HCl}} \times T_{ti}\right)}{\sum_{i=1}^{n}\left(T_{ti}\right)} \qquad \text{(Eq. 2)}$$

Where,

L_{tiHCl}= The HCl emission limit for individual emission unit i in paragraph (i)(4) of this section for a group 1 furnace or in paragraph (j)(1) of this section for an in-line fluxer; and

L_{cHCl}= The HCl emission limit for the secondary aluminum processing unit.

Note: In-line fluxers using no reactive flux materials cannot be included in this calculation since they are not subject to the HCl limit.

(3) The owner or operator must not discharge or allow to be discharged to the atmosphere any 3-day, 24-hour rolling average emissions of D/F in excess of:

$$L_{C_{D/F}} = \frac{\sum_{i=1}^{n}\left(L_{ti_{D/F}} \times T_{ti}\right)}{\sum_{i=1}^{n}\left(T_{ti}\right)} \qquad (Eq.\ 3)$$

Where,

$L_{tiD/F}$= The D/F emission limit for individual emission unit i in paragraph (i)(3) of this section for a group 1 furnace; and

$L_{cD/F}$= The D/F emission limit for the secondary aluminum processing unit.

Note: Clean charge furnaces cannot be included in this calculation since they are not subject to the D/F limit.

(4) The owner or operator of a SAPU at a secondary aluminum production facility that is a major source may demonstrate compliance with the emission limits of paragraphs (k)(1) through (3) of this section by demonstrating that each emission unit within the SAPU is in compliance with the applicable emission limits of paragraphs (i) and (j) of this section.

(5) The owner or operator of a SAPU at a secondary aluminum production facility that is an area source may demonstrate compliance with the emission limits of paragraph (k)(3) of this section by demonstrating that each emission unit within the SAPU is in compliance with the emission limit of paragraph (i)(3) of this section.

(6) With the prior approval of the responsible permitting authority, an owner or operator may redesignate any existing group 1 furnace or in-line fluxer at a secondary aluminum production facility as a new emission unit. Any emission unit so redesignated may thereafter be included in a new SAPU at that facility. Any such redesignation will be solely for the purpose of this MACT standard and will be irreversible.

[65 FR 15710, Mar. 23, 2000, as amended at 67 FR 59792, Sept. 24, 2002; 67 FR 79816, Dec. 30, 2002; 70 FR 57517, Oct. 3, 2005]

§ 63.1506 Operating requirements.

(a) *Summary.* (1) On and after the compliance date established by §63.1501, the owner or operator must operate all new and existing affected sources and control equipment according to the requirements in this section.

(2) The owner or operator of an existing sweat furnace that meets the specifications of §63.1505(f)(1) must operate the sweat furnace and control equipment according to the requirements of this section on and after the compliance date of this standard.

(3) The owner or operator of a new sweat furnace that meets the specifications of §63.1505(f)(1) must operate the sweat furnace and control equipment according to the requirements of this section by March 23, 2000 or upon startup, whichever is later.

(4) Operating requirements are summarized in Table 2 to this subpart.

(b) *Labeling.* The owner or operator must provide and maintain easily visible labels posted at each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln that identifies the applicable emission limits and means of compliance, including:

(1) The type of affected source or emission unit (*e.g.,* scrap dryer/delacquering kiln/decoating kiln, group 1 furnace, group 2 furnace, in-line fluxer).

(2) The applicable operational standard(s) and control method(s) (work practice or control device). This includes, but is not limited to, the type of charge to be used for a furnace (*e.g* ., clean scrap only, all scrap, etc.), flux materials and addition practices, and the applicable operating parameter ranges and requirements as incorporated in the OM&M plan.

(3) The afterburner operating temperature and design residence time for a scrap dryer/delacquering kiln/decoating kiln.

(c) *Capture/collection systems.* For each affected source or emission unit equipped with an add-on air pollution control device, the owner or operator must:

(1) Design and install a system for the capture and collection of emissions to meet the engineering standards for minimum exhaust rates as published by the American Conference of Governmental Industrial Hygienists in chapters 3 and 5 of “Industrial Ventilation: A Manual of Recommended Practice” (incorporated by reference in §63.1502 of this subpart);

(2) Vent captured emissions through a closed system, except that dilution air may be added to emission streams for the purpose of controlling temperature at the inlet to a fabric filter; and

(3) Operate each capture/collection system according to the procedures and requirements in the OM&M plan.

(d) *Feed/charge weight.* The owner or operator of each affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) or µg/Mg (gr/ton) of feed/charge must:

(1) Except as provided in paragraph (d)(3) of this section, install and operate a device that measures and records or otherwise determine the weight of feed/charge (or throughput) for each operating cycle or time period used in the performance test; and

(2) Operate each weight measurement system or other weight determination procedure in accordance with the OM&M plan.

(3) The owner or operator may chose to measure and record aluminum production weight from an affected source or emission unit rather than feed/charge weight to an affected source or emission unit, provided that:

(i) The aluminum production weight, rather than feed/charge weight is measured and recorded for all emission units within a SAPU; and

(ii) All calculations to demonstrate compliance with the emission limits for SAPUs are based on aluminum production weight rather than feed/charge weight.

(e) *Aluminum scrap shredder.* The owner or operator of a scrap shredder with emissions controlled by a fabric filter must operate a bag leak detection system, or a continuous opacity monitor, or conduct visible emissions observations.

(1) If a bag leak detection system is used to meet the monitoring requirements in §63.1510, the owner or operator must:

(i) Initiate corrective action within 1-hour of a bag leak detection system alarm and complete the corrective action procedures in accordance with the OM&M plan.

(ii) Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month block reporting period. In calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If the owner or operator takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner or operator to initiate corrective action.

(2) If a continuous opacity monitoring system is used to meet the monitoring requirements in §63.1510, the owner or operator must initiate corrective action within 1-hour of any 6-minute average reading of 5 percent or more opacity and complete the corrective action procedures in accordance with the OM&M plan.

(3) If visible emission observations are used to meet the monitoring requirements in §63.1510, the owner or operator must initiate corrective action within 1-hour of any observation of visible emissions during a daily visible emissions test and complete the corrective action procedures in accordance with the OM&M plan.

(f) *Thermal chip dryer.* The owner or operator of a thermal chip dryer with emissions controlled by an afterburner must:

(1) Maintain the 3-hour block average operating temperature of each afterburner at or above the average temperature established during the performance test.

(2) Operate each afterburner in accordance with the OM&M plan.

(3) Operate each thermal chip dryer using only unpainted aluminum chips as the feedstock.

(g) *Scrap dryer/delacquering kiln/decoating kiln.* The owner or operator of a scrap dryer/delacquering kiln/decoating kiln with emissions controlled by an afterburner and a lime-injected fabric filter must:

(1) For each afterburner,

(i) Maintain the 3-hour block average operating temperature of each afterburner at or above the average temperature established during the performance test.

(ii) Operate each afterburner in accordance with the OM&M plan.

(2) If a bag leak detection system is used to meet the fabric filter monitoring requirements in §63.1510,

(i) Initiate corrective action within 1-hour of a bag leak detection system alarm and complete any necessary corrective action procedures in accordance with the OM&M plan.

(ii) Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month block reporting period. In calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If the owner or operator takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner or operator to initiate corrective action.

(3) If a continuous opacity monitoring system is used to meet the monitoring requirements in §63.1510, initiate corrective action within 1-hour of any 6-minute average reading of 5 percent or more opacity and complete the corrective action procedures in accordance with the OM&M plan.

(4) Maintain the 3-hour block average inlet temperature for each fabric filter at or below the average temperature established during the performance test, plus 14 °C (plus 25 °F).

(5) For a continuous injection device, maintain free-flowing lime in the hopper to the feed device at all times and maintain the lime feeder setting at the same level established during the performance test.

(h) *Sweat furnace.* The owner or operator of a sweat furnace with emissions controlled by an afterburner must:

(1) Maintain the 3-hour block average operating temperature of each afterburner at or above:

(i) The average temperature established during the performance test; or

(ii) 1600 °F if a performance test was not conducted, and the afterburner meets the specifications of §63.1505(f)(1).

(2) Operate each afterburner in accordance with the OM&M plan.

(i) *Dross-only furnace.* The owner or operator of a dross-only furnace with emissions controlled by a fabric filter must:

(1) If a bag leak detection system is used to meet the monitoring requirements in §63.1510,

(i) Initiate corrective action within 1-hour of a bag leak detection system alarm and complete the corrective action procedures in accordance with the OM&M plan.

(ii) Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month block reporting period. In calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If the owner or operator takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner or operator to initiate corrective action.

(2) If a continuous opacity monitoring system is used to meet the monitoring requirements in §63.1510, initiate corrective action within 1-hour of any 6-minute average reading of 5 percent or more opacity and complete the corrective action procedures in accordance with the OM&M plan.

(3) Operate each furnace using dross and salt flux as the sole feedstock.

(j) *Rotary dross cooler.* The owner or operator of a rotary dross cooler with emissions controlled by a fabric filter must:

(1) If a bag leak detection system is used to meet the monitoring requirements in §63.1510,

(i) Initiate corrective action within 1-hour of a bag leak detection system alarm and complete the corrective action procedures in accordance with the OM&M plan.

(ii) Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month block reporting period. In calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If the owner or operator takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner or operator to initiate corrective action.

(2) If a continuous opacity monitoring system is used to meet the monitoring requirements in §63.1510, initiate corrective action within 1 hour of any 6-minute average reading of 5 percent or more opacity and complete the corrective action procedures in accordance with the OM&M plan.

(k) *In-line fluxer.* The owner or operator of an in-line fluxer with emissions controlled by a lime-injected fabric filter must:

(1) If a bag leak detection system is used to meet the monitoring requirements in §63.1510,

(i) Initiate corrective action within 1-hour of a bag leak detection system alarm and complete the corrective action procedures in accordance with the OM&M plan.

(ii) Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month block reporting period. In calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If the owner or operator takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner or operator to initiate corrective action.

(2) If a continuous opacity monitoring system is used to meet the monitoring requirements in §63.1510, initiate corrective action within 1 hour of any 6-minute average reading of 5 percent or more opacity and complete the corrective action procedures in accordance with the OM&M plan.

(3) For a continuous injection system, maintain free-flowing lime in the hopper to the feed device at all times and maintain the lime feeder setting at the same level established during the performance test.

(4) Maintain the total reactive chlorine flux injection rate for each operating cycle or time period used in the performance test at or below the average rate established during the performance test.

(l) *In-line fluxer using no reactive flux material.* The owner or operator of a new or existing in-line fluxer using no reactive flux materials must operate each in-line fluxer using no reactive flux materials.

(m) *Group 1 furnace with add-on air pollution control devices.* The owner or operator of a group 1 furnace with emissions controlled by a lime-injected fabric filter must:

(1) If a bag leak detection system is used to meet the monitoring requirements in §63.1510, the owner or operator must:

(i) Initiate corrective action within 1 hour of a bag leak detection system alarm.

(ii) Complete the corrective action procedures in accordance with the OM&M plan.

(iii) Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month block reporting period. In calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If the owner or operator takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner or operator to initiate corrective action.

(2) If a continuous opacity monitoring system is used to meet the monitoring requirements in §63.1510, the owner or operator must:

(i) Initiate corrective action within 1 hour of any 6-minute average reading of 5 percent or more opacity; and

(ii) Complete the corrective action procedures in accordance with the OM&M plan.

(3) Maintain the 3-hour block average inlet temperature for each fabric filter at or below the average temperature established during the performance test, plus 14 °C (plus 25 °F).

(4) For a continuous lime injection system, maintain free-flowing lime in the hopper to the feed device at all times and maintain the lime feeder setting at the same level established during the performance test.

(5) Maintain the total reactive chlorine flux injection rate for each operating cycle or time period used in the performance test at or below the average rate established during the performance test.

(6) Operate each sidewell furnace such that:

(i) The level of molten metal remains above the top of the passage between the sidewell and hearth during reactive flux injection, unless emissions from both the sidewell and the hearth are included in demonstrating compliance with all applicable emission limits.

(ii) Reactive flux is added only in the sidewell, unless emissions from both the sidewell and the hearth are included in demonstrating compliance with all applicable emission limits.

(n) *Group 1 furnace without add-on air pollution control devices.* The owner or operator of a group 1 furnace (including a group 1 furnace that is part of a secondary aluminum processing unit) without add-on air pollution control devices must:

(1) Maintain the total reactive chlorine flux injection rate for each operating cycle or time period used in the performance test at or below the average rate established during the performance test.

(2) Operate each furnace in accordance with the work practice/pollution prevention measures documented in the OM&M plan and within the parameter values or ranges established in the OM&M plan.

(3) Operate each group 1 melting/holding furnace subject to the emission standards in §63.1505(i)(2) using only clean charge as the feedstock.

(o) *Group 2 furnace.* The owner or operator of a new or existing group 2 furnace must:

(1) Operate each furnace using only clean charge as the feedstock.

(2) Operate each furnace using no reactive flux.

(p) *Corrective action.* When a process parameter or add-on air pollution control device operating parameter deviates from the value or range established during the performance test and incorporated in the OM&M plan, the owner or operator must initiate corrective action. Corrective action must restore operation of the affected source or emission unit (including the process or control device) to its normal or usual mode of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. Corrective actions taken must include follow-up actions necessary to return the process or control device parameter level(s) to the value or range of values established during the performance test and steps to prevent the likely recurrence of the cause of a deviation.

[65 FR 15710, Mar. 23, 2000, as amended at 67 FR 59792, Sept. 24, 2002; 67 FR 79816, Dec. 30, 2002; 69 FR 53984, Sept. 3, 2004]

§§ 63.1507-63.1509 [Reserved]

Monitoring and Compliance Requirements

§ 63.1510 Monitoring requirements.

(a) *Summary.* On and after the compliance date established by §63.1501, the owner or operator of a new or existing affected source or emission unit must monitor all control equipment and processes according to the requirements in this section. Monitoring requirements for each type of affected source and emission unit are summarized in Table 3 to this subpart.

(b) *Operation, maintenance, and monitoring (OM&M) plan.* The owner or operator must prepare and implement for each new or existing affected source and emission unit, a written operation, maintenance, and monitoring (OM&M) plan. The owner or operator of an existing affected source must submit the OM&M plan to the responsible permitting authority no later than the compliance date established by §63.1501(a). The owner or operator of any new affected source must submit the OM&M plan to the responsible permitting authority within 90 days after a successful initial performance test under §63.1511(b), or within 90 days after the compliance date established by §63.1501(b) if no initial performance test is required. The plan must be accompanied by a written certification by the owner or operator that the OM&M plan satisfies all requirements of this section and is otherwise consistent with the requirements of this subpart. The owner or operator must comply with all of the provisions of the OM&M plan as submitted to the permitting authority, unless and until the plan is revised in accordance with the following procedures. If the permitting authority determines at any time after receipt of the OM&M plan that any revisions of the plan are necessary to satisfy the requirements of this section or this subpart, the owner or operator must promptly make all necessary revisions and resubmit the revised plan. If the owner or operator determines that any other revisions of the OM&M plan are necessary, such revisions will not become effective until the owner or operator submits a description of the changes and a revised plan incorporating them to the permitting authority. Each plan must contain the following information:

(1) Process and control device parameters to be monitored to determine compliance, along with established operating levels or ranges, as applicable, for each process and control device.

(2) A monitoring schedule for each affected source and emission unit.

(3) Procedures for the proper operation and maintenance of each process unit and add-on control device used to meet the applicable emission limits or standards in §63.1505.

(4) Procedures for the proper operation and maintenance of monitoring devices or systems used to determine compliance, including:

(i) Calibration and certification of accuracy of each monitoring device, at least once every 6 months, according to the manufacturer's instructions; and

(ii) Procedures for the quality control and quality assurance of continuous emission or opacity monitoring systems as required by the general provisions in subpart A of this part.

(5) Procedures for monitoring process and control device parameters, including procedures for annual inspections of afterburners, and if applicable, the procedure to be used for determining charge/feed (or throughput) weight if a measurement device is not used.

(6) Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the value or range established in paragraph (b)(1) of this section, including:

(i) Procedures to determine and record the cause of any deviation or excursion, and the time the deviation or excursion began and ended; and

(ii) Procedures for recording the corrective action taken, the time corrective action was initiated, and the time/date corrective action was completed.

(7) A maintenance schedule for each process and control device that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.

(8) Documentation of the work practice and pollution prevention measures used to achieve compliance with the applicable emission limits and a site-specific monitoring plan as required in paragraph (o) of this section for each group 1 furnace not equipped with an add-on air pollution control device.

(c) *Labeling.* The owner or operator must inspect the labels for each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln at least once per calendar month to confirm that posted labels as required by the operational standard in §63.1506(b) are intact and legible.

(d) *Capture/collection system.* The owner or operator must:

(1) Install, operate, and maintain a capture/collection system for each affected source and emission unit equipped with an add-on air pollution control device; and

(2) Inspect each capture/collection and closed vent system at least once each calendar year to ensure that each system is operating in accordance with the operating requirements in §63.1506(c) and record the results of each inspection.

(e) *Feed/charge weight.* The owner or operator of an affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) or µg/Mg (gr/ton) of feed/charge must install, calibrate, operate, and maintain a device to measure and record the total weight of feed/charge to, or the aluminum production from, the affected source or emission unit over the same operating cycle or time period used in the performance test. Feed/charge or aluminum production within SAPUs must be measured and recorded on an emission unit-by-emission unit basis. As an alternative to a measurement device, the owner or operator may use a procedure acceptable to the applicable permitting authority to determine the total weight of feed/charge or aluminum production to the affected source or emission unit.

(1) The accuracy of the weight measurement device or procedure must be ±1 percent of the weight being measured. The owner or operator may apply to the permitting agency for approval to use a device of

alternative accuracy if the required accuracy cannot be achieved as a result of equipment layout or charging practices. A device of alternative accuracy will not be approved unless the owner or operator provides assurance through data and information that the affected source will meet the relevant emission standard.

(2) The owner or operator must verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every 6 months.

(f) *Fabric filters and lime-injected fabric filters.* The owner or operator of an affected source or emission unit using a fabric filter or lime-injected fabric filter to comply with the requirements of this subpart must install, calibrate, maintain, and continuously operate a bag leak detection system as required in paragraph (f)(1) of this section or a continuous opacity monitoring system as required in paragraph (f)(2) of this section. The owner or operator of an aluminum scrap shredder must install and operate a bag leak detection system as required in paragraph (f)(1) of this section, install and operate a continuous opacity monitoring system as required in paragraph (f)(2) of this section, or conduct visible emission observations as required in paragraph (f)(3) of this section.

(1) These requirements apply to the owner or operator of a new or existing affected source or existing emission unit using a bag leak detection system.

(i) The owner or operator must install and operate a bag leak detection system for each exhaust stack of a fabric filter.

(ii) Each triboelectric bag leak detection system must be installed, calibrated, operated, and maintained according to the “Fabric Filter Bag Leak Detection Guidance,” (September 1997). This document is available from the U.S. Environmental Protection Agency; Office of Air Quality Planning and Standards; Emissions, Monitoring and Analysis Division; Emission Measurement Center (MD–19), Research Triangle Park, NC 27711. This document also is available on the Technology Transfer Network (TTN) under Emission Measurement Technical Information (EMTIC), Continuous Emission Monitoring. Other bag leak detection systems must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations.

(iii) The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.

(iv) The bag leak detection system sensor must provide output of relative or absolute PM loadings.

(v) The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.

(vi) The bag leak detection system must be equipped with an alarm system that will sound automatically when an increase in relative PM emissions over a preset level is detected. The alarm must be located where it is easily heard by plant operating personnel.

(vii) For positive pressure fabric filter systems, a bag leak detection system must be installed in each baghouse compartment or cell. For negative pressure or induced air fabric filters, the bag leak detector must be installed downstream of the fabric filter.

(viii) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.

(ix) The baseline output must be established by adjusting the range and the averaging period of the device and establishing the alarm set points and the alarm delay time.

(x) Following initial adjustment of the system, the owner or operator must not adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time except as detailed in the OM&M plan. In no case may the sensitivity be increased by more than 100 percent or decreased more than 50 percent over a 365-day period unless such adjustment follows a complete fabric filter inspection which demonstrates that the fabric filter is in good operating condition.

(2) These requirements apply to the owner or operator of a new or existing affected source or an existing emission unit using a continuous opacity monitoring system.

(i) The owner or operator must install, calibrate, maintain, and operate a continuous opacity monitoring system to measure and record the opacity of emissions exiting each exhaust stack.

(ii) Each continuous opacity monitoring system must meet the design and installation requirements of Performance Specification 1 in appendix B to 40 CFR part 60.

(3) These requirements apply to the owner or operator of a new or existing aluminum scrap shredder who conducts visible emission observations. The owner or operator must:

(i) Perform a visible emissions test for each aluminum scrap shredder using a certified observer at least once a day according to the requirements of Method 9 in appendix A to 40 CFR part 60. Each Method 9 test must consist of five 6-minute observations in a 30-minute period; and

(ii) Record the results of each test.

(g) *Afterburner.* These requirements apply to the owner or operator of an affected source using an afterburner to comply with the requirements of this subpart.

(1) The owner or operator must install, calibrate, maintain, and operate a device to continuously monitor and record the operating temperature of the afterburner consistent with the requirements for continuous monitoring systems in subpart A of this part.

(2) The temperature monitoring device must meet each of these performance and equipment specifications:

(i) The temperature monitoring device must be installed at the exit of the combustion zone of each afterburner.

(ii) The monitoring system must record the temperature in 15-minute block averages and determine and record the average temperature for each 3-hour block period.

(iii) The recorder response range must include zero and 1.5 times the average temperature established according to the requirements in §63.1512(m).

(iv) The reference method must be a National Institute of Standards and Technology calibrated reference thermocouple-potentiometer system or alternate reference, subject to approval by the Administrator.

(3) The owner or operator must conduct an inspection of each afterburner at least once a year and record the results. At a minimum, an inspection must include:

(i) Inspection of all burners, pilot assemblies, and pilot sensing devices for proper operation and clean pilot sensor;

(ii) Inspection for proper adjustment of combustion air;

(iii) Inspection of internal structures (*e.g.,* baffles) to ensure structural integrity;

(iv) Inspection of dampers, fans, and blowers for proper operation;

(v) Inspection for proper sealing;

(vi) Inspection of motors for proper operation;

(vii) Inspection of combustion chamber refractory lining and clean and replace lining as necessary;

(viii) Inspection of afterburner shell for corrosion and/or hot spots;

(ix) Documentation, for the burn cycle that follows the inspection, that the afterburner is operating properly and any necessary adjustments have been made; and

(x) Verification that the equipment is maintained in good operating condition.

(xi) Following an equipment inspection, all necessary repairs must be completed in accordance with the requirements of the OM&M plan.

(h) *Fabric filter inlet temperature.* These requirements apply to the owner or operator of a scrap dryer/delacquering kiln/decoating kiln or a group 1 furnace using a lime-injected fabric filter to comply with the requirements of this subpart.

(1) The owner or operator must install, calibrate, maintain, and operate a device to continuously monitor and record the temperature of the fabric filter inlet gases consistent with the requirements for continuous monitoring systems in subpart A of this part.

(2) The temperature monitoring device must meet each of these performance and equipment specifications:

(i) The monitoring system must record the temperature in 15-minute block averages and calculate and record the average temperature for each 3-hour block period.

(ii) The recorder response range must include zero and 1.5 times the average temperature established according to the requirements in §63.1512(n).

(iii) The reference method must be a National Institute of Standards and Technology calibrated reference thermocouple-potentiometer system or alternate reference, subject to approval by the Administrator.

(i) *Lime injection.* These requirements apply to the owner or operator of an affected source or emission unit using a lime-injected fabric filter to comply with the requirements of this subpart.

(1) The owner or operator of a continuous lime injection system must verify that lime is always free-flowing by either:

(i) Inspecting each feed hopper or silo at least once each 8-hour period and recording the results of each inspection. If lime is found not to be free-flowing during any of the 8-hour periods, the owner or operator must increase the frequency of inspections to at least once every 4-hour period for the next 3 days. The owner or operator may return to inspections at least once every 8 hour period if corrective action results in no further blockages of lime during the 3-day period; or

(ii) Subject to the approval of the permitting agency, installing, operating and maintaining a load cell, carrier gas/lime flow indicator, carrier gas pressure drop measurement system or other system to confirm that lime is free-flowing. If lime is found not to be free-flowing, the owner or operator must promptly initiate and complete corrective action, or

(iii) Subject to the approval of the permitting agency, installing, operating and maintaining a device to monitor the concentration of HCl at the outlet of the fabric filter. If an increase in the concentration of HCl indicates that the lime is not free-flowing, the owner or operator must promptly initiate and complete corrective action.

(2) The owner or operator of a continuous lime injection system must record the lime feeder setting once each day of operation.

(3) An owner or operator who intermittently adds lime to a lime coated fabric filter must obtain approval from the permitting authority for a lime addition monitoring procedure. The permitting authority will not approve a monitoring procedure unless data and information are submitted establishing that the procedure is adequate to ensure that relevant emission standards will be met on a continuous basis.

(j) *Total reactive flux injection rate.* These requirements apply to the owner or operator of a group 1 furnace (with or without add-on air pollution control devices) or in-line fluxer. The owner or operator must:

(1) Install, calibrate, operate, and maintain a device to continuously measure and record the weight of gaseous or liquid reactive flux injected to each affected source or emission unit.

(i) The monitoring system must record the weight for each 15-minute block period, during which reactive fluxing occurs, over the same operating cycle or time period used in the performance test.

(ii) The accuracy of the weight measurement device must be ±1 percent of the weight of the reactive component of the flux being measured. The owner or operator may apply to the permitting authority for permission to use a weight measurement device of alternative accuracy in cases where the reactive flux flow rates are so low as to make the use of a weight measurement device of ±1 percent impracticable. A device of alternative accuracy will not be approved unless the owner or operator provides assurance through data and information that the affected source will meet the relevant emission standards.

(iii) The owner or operator must verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every 6 months.

(2) Calculate and record the gaseous or liquid reactive flux injection rate (kg/Mg or lb/ton) for each operating cycle or time period used in the performance test using the procedure in §63.1512(o).

(3) Record, for each 15-minute block period during each operating cycle or time period used in the performance test during which reactive fluxing occurs, the time, weight, and type of flux for each addition of:

(i) Gaseous or liquid reactive flux other than chlorine; and

(ii) Solid reactive flux.

(4) Calculate and record the total reactive flux injection rate for each operating cycle or time period used in the performance test using the procedure in §63.1512(o).

(5) The owner or operator of a group 1 furnace or in-line fluxer performing reactive fluxing may apply to the Administrator for approval of an alternative method for monitoring and recording the total reactive flux addition rate based on monitoring the weight or quantity of reactive flux per ton of feed/charge for each operating cycle or time period used in the performance test. An alternative monitoring method will not be approved unless the owner or operator provides assurance through data and information that the affected source will meet the relevant emission standards on a continuous basis.

(k) *Thermal chip dryer.* These requirements apply to the owner or operator of a thermal chip dryer with emissions controlled by an afterburner. The owner or operator must:

(1) Record the type of materials charged to the unit for each operating cycle or time period used in the performance test.

(2) Submit a certification of compliance with the applicable operational standard for charge materials in §63.1506(f)(3) for each 6-month reporting period. Each certification must contain the information in §63.1516(b)(2)(i).

(l) *Dross-only furnace.* These requirements apply to the owner or operator of a dross-only furnace. The owner or operator must:

(1) Record the materials charged to each unit for each operating cycle or time period used in the performance test.

(2) Submit a certification of compliance with the applicable operational standard for charge materials in §63.1506(i)(3) for each 6-month reporting period. Each certification must contain the information in §63.1516(b)(2)(ii).

(m) *In-line fluxers using no reactive flux.* The owner or operator of an in-line fluxer that uses no reactive flux materials must submit a certification of compliance with the operational standard for no reactive flux materials in §63.1506(l) for each 6-month reporting period. Each certification must contain the information in §63.1516(b)(2)(vi).

(n) *Sidewell group 1 furnace with add-on air pollution control devices.* These requirements apply to the owner or operator of a sidewell group 1 furnace using add-on air pollution control devices. The owner or operator must:

(1) Record in an operating log for each charge of a sidewell furnace that the level of molten metal was above the top of the passage between the sidewell and hearth during reactive flux injection, unless the furnace hearth was also equipped with an add-on control device.

(2) Submit a certification of compliance with the operational standards in §63.1506(m)(7) for each 6-month reporting period. Each certification must contain the information in §63.1516(b)(2)(iii).

(o) *Group 1 furnace without add-on air pollution control devices.* These requirements apply to the owner or operator of a group 1 furnace that is not equipped with an add-on air pollution control device.

(1) The owner or operator must develop, in consultation with the responsible permitting authority, a written site-specific monitoring plan. The site-specific monitoring plan must be submitted to the permitting authority as part of the OM&M plan. The site-specific monitoring plan must contain sufficient procedures to ensure continuing compliance with all applicable emission limits and must demonstrate, based on documented test results, the relationship between emissions of PM, HCl, and D/F and the proposed monitoring parameters for each pollutant. Test data must establish the highest level of PM, HCl, and D/F that will be emitted from the furnace. This may be determined by conducting performance tests and monitoring operating parameters while charging the furnace with feed/charge materials containing the highest anticipated levels of oils and coatings and fluxing at the highest anticipated rate. If the permitting authority determines that any revisions of the site-specific monitoring plan are necessary to meet the requirements of this section or this subpart, the owner or operator must promptly make all necessary revisions and resubmit the revised plan to the permitting authority.

(i) The owner or operator of an existing affected source must submit the site-specific monitoring plan to the applicable permitting authority for review at least 6 months prior to the compliance date.

(ii) The permitting authority will review and approve or disapprove a proposed plan, or request changes to a plan, based on whether the plan contains sufficient provisions to ensure continuing compliance with applicable emission limits and demonstrates, based on documented test results, the relationship between emissions of PM, HCl, and D/F and the proposed monitoring parameters for each pollutant. Test data must establish the highest level of PM, HCl, and D/F that will be emitted from the furnace. Subject to permitting

agency approval of the OM&M plan, this may be determined by conducting performance tests and monitoring operating parameters while charging the furnace with feed/charge materials containing the highest anticipated levels of oils and coatings and fluxing at the highest anticipated rate.

(2) Each site-specific monitoring plan must document each work practice, equipment/design practice, pollution prevention practice, or other measure used to meet the applicable emission standards.

(3) Each site-specific monitoring plan must include provisions for unit labeling as required in paragraph (c) of this section, feed/charge weight measurement (or production weight measurement) as required in paragraph (e) of this section and flux weight measurement as required in paragraph (j) of this section.

(4) Each site-specific monitoring plan for a melting/holding furnace subject to the clean charge emission standard in §63.1505(i)(3) must include these requirements:

(i) The owner or operator must record the type of feed/ charge (*e.g* ., ingot, thermally dried chips, dried scrap, etc.) for each operating cycle or time period used in the performance test; and

(ii) The owner or operator must submit a certification of compliance with the applicable operational standard for clean charge materials in §63.1506(n)(3) for each 6-month reporting period. Each certification must contain the information in §63.1516(b)(2)(iv).

(5) If a continuous emission monitoring system is included in a site-specific monitoring plan, the plan must include provisions for the installation, operation, and maintenance of the system to provide quality-assured measurements in accordance with all applicable requirements of the general provisions in subpart A of this part.

(6) If a continuous opacity monitoring system is included in a site-specific monitoring plan, the plan must include provisions for the installation, operation, and maintenance of the system to provide quality-assured measurements in accordance with all applicable requirements of this subpart.

(7) If a site-specific monitoring plan includes a scrap inspection program for monitoring the scrap contaminant level of furnace feed/charge materials, the plan must include provisions for the demonstration and implementation of the program in accordance with all applicable requirements in paragraph (p) of this section.

(8) If a site-specific monitoring plan includes a calculation method for monitoring the scrap contaminant level of furnace feed/charge materials, the plan must include provisions for the demonstration and implementation of the program in accordance with all applicable requirements in paragraph (q) of this section.

(p) *Scrap inspection program for group 1 furnace without add-on air pollution control devices.* A scrap inspection program must include:

(1) A proven method for collecting representative samples and measuring the oil and coatings content of scrap samples;

(2) A scrap inspector training program;

(3) An established correlation between visual inspection and physical measurement of oil and coatings content of scrap samples;

(4) Periodic physical measurements of oil and coatings content of randomly-selected scrap samples and comparison with visual inspection results;

(5) A system for assuring that only acceptable scrap is charged to an affected group 1 furnace; and

(6) Recordkeeping requirements to document conformance with plan requirements.

(q) *Monitoring of scrap contamination level by calculation method for group 1 furnace without add-on air pollution control devices.* The owner or operator of a group 1 furnace dedicated to processing a distinct type of furnace feed/charge composed of scrap with a uniform composition (such as rejected product from a manufacturing process for which the coating-to-scrap ratio can be documented) may include a program in the site-specific monitoring plan for determining, monitoring, and certifying the scrap contaminant level using a calculation method rather than a scrap inspection program. A scrap contaminant monitoring program using a calculation method must include:

(1) Procedures for the characterization and documentation of the contaminant level of the scrap prior to the performance test.

(2) Limitations on the furnace feed/charge to scrap of the same composition as that used in the performance test. If the performance test was conducted with a mixture of scrap and clean charge, limitations on the proportion of scrap in the furnace feed/charge to no greater than the proportion used during the performance test.

(3) Operating, monitoring, recordkeeping, and reporting requirements to ensure that no scrap with a contaminant level higher than that used in the performance test is charged to the furnace.

(r) *Group 2 furnace.* These requirements apply to the owner or operator of a new or existing group 2 furnace. The owner or operator must:

(1) Record a description of the materials charged to each furnace, including any nonreactive, non-HAP-containing/non-HAP-generating fluxing materials or agents.

(2) Submit a certification of compliance with the applicable operational standard for charge materials in §63.1506(o) for each 6-month reporting period. Each certification must contain the information in §63.1516(b)(2)(v).

(s) *Site-specific requirements for secondary aluminum processing units.* (1) An owner or operator of a secondary aluminum processing unit at a facility must include, within the OM&M plan prepared in accordance with §63.1510(b), the following information:

(i) The identification of each emission unit in the secondary aluminum processing unit;

(ii) The specific control technology or pollution prevention measure to be used for each emission unit in the secondary aluminum processing unit and the date of its installation or application;

(iii) The emission limit calculated for each secondary aluminum processing unit and performance test results with supporting calculations demonstrating initial compliance with each applicable emission limit;

(iv) Information and data demonstrating compliance for each emission unit with all applicable design, equipment, work practice or operational standards of this subpart; and

(v) The monitoring requirements applicable to each emission unit in a secondary aluminum processing unit and the monitoring procedures for daily calculation of the 3-day, 24-hour rolling average using the procedure in §63.1510(t).

(2) The SAPU compliance procedures within the OM&M plan may not contain any of the following provisions:

(i) Any averaging among emissions of differing pollutants;

(ii) The inclusion of any affected sources other than emission units in a secondary aluminum processing unit;

(iii) The inclusion of any emission unit while it is shutdown; or

(iv) The inclusion of any periods of startup, shutdown, or malfunction in emission calculations.

(3) To revise the SAPU compliance provisions within the OM&M plan prior to the end of the permit term, the owner or operator must submit a request to the applicable permitting authority containing the information required by paragraph (s)(1) of this section and obtain approval of the applicable permitting authority prior to implementing any revisions.

(t) *Secondary aluminum processing unit.* Except as provided in paragraph (u) of this section, the owner or operator must calculate and record the 3-day, 24-hour rolling average emissions of PM, HCl, and D/F for each secondary aluminum processing unit on a daily basis. To calculate the 3-day, 24-hour rolling average, the owner or operator must:

(1) Calculate and record the total weight of material charged to each emission unit in the secondary aluminum processing unit for each 24-hour day of operation using the feed/charge weight information required in paragraph (e) of this section. If the owner or operator chooses to comply on the basis of weight of aluminum produced by the emission unit, rather than weight of material charged to the emission unit, all performance test emissions results and all calculations must be conducted on the aluminum production weight basis.

(2) Multiply the total feed/charge weight to the emission unit, or the weight of aluminum produced by the emission unit, for each emission unit for the 24-hour period by the emission rate (in lb/ton of feed/charge) for that emission unit (as determined during the performance test) to provide emissions for each emission unit for the 24-hour period, in pounds.

(3) Divide the total emissions for each SAPU for the 24-hour period by the total material charged to the SAPU, or the weight of aluminum produced by the SAPU over the 24-hour period to provide the daily emission rate for the SAPU.

(4) Compute the 24-hour daily emission rate using Equation 4:

$$E_{day} = \frac{\sum_{i=1}^{n}\left(T_i \times ER_i\right)}{\sum_{i=1}^{n} T_i} \qquad (Eq.\ 4)$$

Where,

E_{day}= The daily PM, HCl, or D/F emission rate for the secondary aluminum processing unit for the 24-hour period;

T_i= The total amount of feed, or aluminum produced, for emission unit i for the 24-hour period (tons or Mg);

ER_i= The measured emission rate for emission unit i as determined in the performance test (lb/ton or µg/Mg of feed/charge); and

n = The number of emission units in the secondary aluminum processing unit.

(5) Calculate and record the 3-day, 24-hour rolling average for each pollutant each day by summing the daily emission rates for each pollutant over the 3 most recent consecutive days and dividing by 3.

(u) *Secondary aluminum processing unit compliance by individual emission unit demonstration.* As an alternative to the procedures of paragraph (t) of this section, an owner or operator may demonstrate, through performance tests, that each individual emission unit within the secondary aluminum production unit is in compliance with the applicable emission limits for the emission unit.

(v) *Alternative monitoring method for lime addition.* The owner or operator of a lime-coated fabric filter that employs intermittent or noncontinuous lime addition may apply to the Administrator for approval of an alternative method for monitoring the lime addition schedule and rate based on monitoring the weight of lime added per ton of feed/charge for each operating cycle or time period used in the performance test. An alternative monitoring method will not be approved unless the owner or operator provides assurance through data and information that the affected source will meet the relevant emission standards on a continuous basis.

(w) *Alternative monitoring methods.* If an owner or operator wishes to use an alternative monitoring method to demonstrate compliance with any emission standard in this subpart, other than those alternative monitoring methods which may be authorized pursuant to §63.1510(j)(5) and §63.1510(v), the owner or operator may submit an application to the Administrator. Any such application will be processed according to the criteria and procedures set forth in paragraphs (w)(1) through (6) of this section.

(1) The Administrator will not approve averaging periods other than those specified in this section.

(2) The owner or operator must continue to use the original monitoring requirement until necessary data are submitted and approval is received to use another monitoring procedure.

(3) The owner or operator shall submit the application for approval of alternate monitoring methods no later than the notification of the performance test. The application must contain the information specified in paragraphs (w)(3) (i) through (iii) of this section:

(i) Data or information justifying the request, such as the technical or economic infeasibility, or the impracticality of using the required approach;

(ii) A description of the proposed alternative monitoring requirements, including the operating parameters to be monitored, the monitoring approach and technique, and how the limit is to be calculated; and

(iii) Data and information documenting that the alternative monitoring requirement(s) would provide equivalent or better assurance of compliance with the relevant emission standard(s).

(4) The Administrator will not approve an alternate monitoring application unless it would provide equivalent or better assurance of compliance with the relevant emission standard(s). Before disapproving any alternate monitoring application, the Administrator will provide:

(i) Notice of the information and findings upon which the intended disapproval is based; and

(ii) Notice of opportunity for the owner or operator to present additional supporting information before final action is taken on the application. This notice will specify how much additional time is allowed for the owner or operator to provide additional supporting information.

(5) The owner or operator is responsible for submitting any supporting information in a timely manner to enable the Administrator to consider the application prior to the performance test. Neither submittal of an application nor the Administrator's failure to approve or disapprove the application relieves the owner or operator of the responsibility to comply with any provisions of this subpart.

(6) The Administrator may decide at any time, on a case-by-case basis, that additional or alternative operating limits, or alternative approaches to establishing operating limits, are necessary to demonstrate compliance with the emission standards of this subpart.

[65 FR 15710, Mar. 23, 2000, as amended at 67 FR 59792, Sept. 24, 2002; 67 FR 79816, Dec. 30, 2002; 69 FR 53984, Sept. 3, 2004]

§ 63.1511 Performance test/compliance demonstration general requirements.

(a) *Site-specific test plan.* Prior to conducting any performance test required by this subpart, the owner or operator must prepare a site-specific test plan which satisfies all of the requirements, and must obtain approval of the plan pursuant to the procedures, set forth in §63.7(c).

(b) *Initial performance test.* Following approval of the site-specific test plan, the owner or operator must demonstrate initial compliance with each applicable emission, equipment, work practice, or operational standard for each affected source and emission unit, and report the results in the notification of compliance status report as described in §63.1515(b). The owner or operator of any existing affected source for which an initial performance test is required to demonstrate compliance must conduct this initial performance test no later than the date for compliance established by §63.1501(a). The owner or operator of any new affected source for which an initial performance test is required must conduct this initial performance test within 90 days after the date for compliance established by §63.1501(b). Except for the date by which the performance test must be conducted, the owner or operator must conduct each performance test in accordance with the requirements and procedures set forth in §63.7(c). Owners or operators of affected sources located at facilities which are area sources are subject only to those performance testing requirements pertaining to D/F. Owners or operators of sweat furnaces meeting the specifications of §63.1505(f)(1) are not required to conduct a performance test.

(1) The owner or operator must conduct each test while the affected source or emission unit is operating at the highest production level with charge materials representative of the range of materials processed by the unit and, if applicable, at the highest reactive fluxing rate.

(2) Each performance test for a continuous process must consist of 3 separate runs; pollutant sampling for each run must be conducted for the time period specified in the applicable method or, in the absence of a specific time period in the test method, for a minimum of 3 hours.

(3) Each performance test for a batch process must consist of three separate runs; pollutant sampling for each run must be conducted over the entire process operating cycle.

(4) Where multiple affected sources or emission units are exhausted through a common stack, pollutant sampling for each run must be conducted over a period of time during which all affected sources or emission units complete at least 1 entire process operating cycle or for 24 hours, whichever is shorter.

(5) Initial compliance with an applicable emission limit or standard is demonstrated if the average of three runs conducted during the performance test is less than or equal to the applicable emission limit or standard.

(c) *Test methods.* The owner or operator must use the following methods in appendix A to 40 CFR part 60 to determine compliance with the applicable emission limits or standards:

(1) Method 1 for sample and velocity traverses.

(2) Method 2 for velocity and volumetric flow rate.

(3) Method 3 for gas analysis.

(4) Method 4 for moisture content of the stack gas.

(5) Method 5 for the concentration of PM.

(6) Method 9 for visible emission observations.

(7) Method 23 for the concentration of D/F.

(8) Method 25A for the concentration of THC, as propane.

(9) Method 26A for the concentration of HCl. Where a lime-injected fabric filter is used as the control device to comply with the 90 percent reduction standard, the owner or operator must measure the fabric filter inlet concentration of HCl at a point before lime is introduced to the system.

(d) *Alternative methods.* The owner or operator may use an alternative test method, subject to approval by the Administrator.

(e) *Repeat tests.* The owner or operator of new or existing affected sources and emission units located at secondary aluminum production facilities that are major sources must conduct a performance test every 5 years following the initial performance test.

(f) *Testing of representative emission units.* With the prior approval of the permitting authority, an owner or operator may utilize emission rates obtained by testing a particular type of group 1 furnace which is not controlled by any add-on control device, or by testing an in-line flux box which is not controlled by any add-on control device, to determine the emission rate for other units of the same type at the same facility. Such emission test results may only be considered to be representative of other units if all of the following criteria are satisfied:

(1) The tested emission unit must use feed materials and charge rates which are comparable to the emission units that it represents;

(2) The tested emission unit must use the same type of flux materials in the same proportions as the emission units it represents;

(3) The tested emission unit must be operated utilizing the same work practices as the emission units that it represents;

(4) The tested emission unit must be of the same design as the emission units that it represents; and

(5) The tested emission unit must be tested under the highest load or capacity reasonably expected to occur for any of the emission units that it represents.

(g) *Establishment of monitoring and operating parameter values.* The owner or operator of new or existing affected sources and emission units must establish a minimum or maximum operating parameter value, or an operating parameter range for each parameter to be monitored as required by §63.1510 that ensures compliance with the applicable emission limit or standard. To establish the minimum or maximum value or range, the owner or operator must use the appropriate procedures in this section and submit the information required by §63.1515(b)(4) in the notification of compliance status report. The owner or operator may use existing data in addition to the results of performance tests to establish operating parameter values for compliance monitoring provided each of the following conditions are met to the satisfaction of the applicable permitting authority:

(1) The complete emission test report(s) used as the basis of the parameter(s) is submitted.

(2) The same test methods and procedures as required by this subpart were used in the test.

(3) The owner or operator certifies that no design or work practice changes have been made to the source, process, or emission control equipment since the time of the report.

(4) All process and control equipment operating parameters required to be monitored were monitored as required in this subpart and documented in the test report.

(h) *Testing of commonly-ducted units within a secondary aluminum processing unit.* When group 1 furnaces and/or in-line fluxers are included in a single existing SAPU or new SAPU, and the emissions from more than one emission unit within that existing SAPU or new SAPU are manifolded to a single control device, compliance for all units within the SAPU is demonstrated if the total measured emissions from all controlled and uncontrolled units in the SAPU do not exceed the emission limits calculated for that SAPU based on the applicable equation in §63.1505(k).

(i) *Testing of commonly-ducted units not within a secondary aluminum processing unit.* With the prior approval of the permitting authority, an owner or operator may do combined performance testing of two or more individual affected sources or emission units which are not included in a single existing SAPU or new SAPU, but whose emissions are manifolded to a single control device. Any such performance testing of commonly-ducted units must satisfy the following basic requirements:

(1) All testing must be designed to verify that each affected source or emission unit individually satisfies all emission requirements applicable to that affected source or emission unit;

(2) All emissions of pollutants subject to a standard must be tested at the outlet from each individual affected source or emission unit while operating under the highest load or capacity reasonably expected to occur, and prior to the point that the emissions are manifolded together with emissions from other affected sources or emission units;

(3) The combined emissions from all affected sources and emission units which are manifolded to a single emission control device must be tested at the outlet of the emission control device;

(4) All tests at the outlet of the emission control device must be conducted with all affected sources and emission units whose emissions are manifolded to the control device operating simultaneously under the highest load or capacity reasonably expected to occur; and

(5) For purposes of demonstrating compliance of a commonly-ducted unit with any emission limit for a particular type of pollutant, the emissions of that pollutant by the individual unit shall be presumed to be controlled by the same percentage as total emissions of that pollutant from all commonly-ducted units are controlled at the outlet of the emission control device.

[65 FR 15710, Mar. 23, 2000, as amended at 67 FR 59792, Sept. 24, 2002; 67 FR 79817, Dec. 30, 2002]

§ 63.1512 Performance test/compliance demonstration requirements and procedures.

(a) *Aluminum scrap shredder.* The owner or operator must conduct performance tests to measure PM emissions at the outlet of the control system. If visible emission observations is the selected monitoring option, the owner or operator must record visible emission observations from each exhaust stack for all consecutive 6-minute periods during the PM emission test according to the requirements of Method 9 in appendix A to 40 CFR part 60.

(b) *Thermal chip dryer.* The owner or operator must conduct a performance test to measure THC and D/F emissions at the outlet of the control device while the unit processes only unpainted aluminum chips.

(c) *Scrap dryer/delacquering kiln/decoating kiln.* The owner or operator must conduct performance tests to measure emissions of THC, D/F, HCl, and PM at the outlet of the control device.

(1) If the scrap dryer/delacquering kiln/decoating kiln is subject to the alternative emission limits in §63.1505(e), the average afterburner operating temperature in each 3-hour block period must be maintained at or above 760 °C (1400 °F) for the test.

(2) The owner or operator of a scrap dryer/delacquering kiln/decoating kiln subject to the alternative limits in §63.1505(e) must submit a written certification in the notification of compliance status report containing the information required by §63.1515(b)(7).

(d) *Group 1 furnace with add-on air pollution control devices.* (1) The owner or operator of a group 1 furnace that processes scrap other than clean charge materials with emissions controlled by a lime-injected fabric filter must conduct performance tests to measure emissions of PM and D/F at the outlet of the control device and emissions of HCl at the outlet (for the emission limit) or the inlet and the outlet (for the percent reduction standard).

(2) The owner or operator of a group 1 furnace that processes only clean charge materials with emissions controlled by a lime-injected fabric filter must conduct performance tests to measure emissions of PM at the outlet of the control device and emissions of HCl at the outlet (for the emission limit) or the inlet and the outlet (for the percent reduction standard).

(3) The owner or operator may choose to determine the rate of reactive flux addition to the group 1 furnace and assume, for the purposes of demonstrating compliance with the SAPU emission limit, that all reactive flux added to the group 1 furnace is emitted. Under these circumstances, the owner or operator is not required to conduct an emission test for HCl.

(4) The owner or operator of a sidewell group 1 furnace that conducts reactive fluxing (except for cover flux) in the hearth, or that conducts reactive fluxing in the sidewell at times when the level of molten metal falls below the top of the passage between the sidewell and the hearth, must conduct the performance tests required by paragraph (d)(1) or (d)(2) of this section, to measure emissions from both the sidewell and the hearth.

(e) *Group 1 furnace (including melting holding furnaces) without add-on air pollution control devices.* In the site-specific monitoring plan required by §63.1510(o), the owner or operator of a group 1 furnace (including a melting/holding furnaces) without add-on air pollution control devices must include data and information demonstrating compliance with the applicable emission limits.

(1) If the group 1 furnace processes other than clean charge material, the owner or operator must conduct emission tests to measure emissions of PM, HCl, and D/F at the furnace exhaust outlet.

(2) If the group 1 furnace processes only clean charge, the owner or operator must conduct emission tests to simultaneously measure emissions of PM and HCl at the furnace exhaust outlet. A D/F test is not required. Each test must be conducted while the group 1 furnace (including a melting/holding furnace) processes only clean charge.

(3) The owner or operator may choose to determine the rate of reactive flux addition to the group 1 furnace and assume, for the purposes of demonstrating compliance with the SAPU emission limit, that all reactive flux added to the group 1 furnace is emitted. Under these circumstances, the owner or operator is not required to conduct an emission test for HCl.

(f) *Sweat furnace.* Except as provided in §63.1505(f)(1), the owner or operator must measure emissions of D/F from each sweat furnace at the outlet of the control device.

(g) *Dross-only furnace.* The owner or operator must conduct a performance test to measure emissions of PM from each dross-only furnace at the outlet of each control device while the unit processes only dross and salt flux as the sole feedstock.

(h) *In-line fluxer.* (1) The owner or operator of an in-line fluxer that uses reactive flux materials must conduct a performance test to measure emissions of HCl and PM or otherwise demonstrate compliance in

accordance with paragraph (h)(2) of this section. If the in-line fluxer is equipped with an add-on control device, the emissions must be measured at the outlet of the control device.

(2) The owner or operator may choose to limit the rate at which reactive chlorine flux is added to an in-line fluxer and assume, for the purposes of demonstrating compliance with the SAPU emission limit, that all chlorine in the reactive flux added to the in-line fluxer is emitted as HCl. Under these circumstances, the owner or operator is not required to conduct an emission test for HCl. If the owner or operator of any in-line flux box which has no ventilation ductwork manifolded to any outlet or emission control device chooses to demonstrate compliance with the emission limit for HCl by limiting use of reactive chlorine flux and assuming that all chlorine in the flux is emitted as HCl, compliance with the HCl limit shall also constitute compliance with the emission limit for PM, and no separate emission test for PM is required. In this case, the owner or operator of the unvented in-line flux box must utilize the maximum permissible PM emission rate for the in-line flux boxes when determining the total emissions for any SAPU which includes the flux box.

(i) *Rotary dross cooler.* The owner or operator must conduct a performance test to measure PM emissions at the outlet of the control device.

(j) *Secondary aluminum processing unit.* The owner or operator must conduct performance tests as described in paragraphs (j)(1) through (3) of this section. The results of the performance tests are used to establish emission rates in lb/ton of feed/charge for PM and HCl and µg TEQ/Mg of feed/charge for D/F emissions from each emission unit. These emission rates are used for compliance monitoring in the calculation of the 3-day, 24-hour rolling average emission rates using the equation in §63.1510(t). A performance test is required for:

(1) Each group 1 furnace processing only clean charge to measure emissions of PM and either:

(i) Emissions of HCl (for the emission limit); or

(ii) The mass flow rate of HCl at the inlet to and outlet from the control device (for the percent reduction standard).

(2) Each group 1 furnace that processes scrap other than clean charge to measure emissions of PM and D/F and either:

(i) Emissions of HCl (for the emission limit); or

(ii) The mass flow rate of HCl at the inlet to and outlet from the control device (for the percent reduction standard).

(3) Each in-line fluxer to measure emissions of PM and HCl.

(k) *Feed/charge weight measurement.* During the emission test(s) conducted to determine compliance with emission limits in a kg/Mg (lb/ton) format, the owner or operator of an affected source or emission unit, subject to an emission limit in a kg/Mg (lb/ton) of feed/charge format, must measure (or otherwise determine) and record the total weight of feed/charge to the affected source or emission unit for each of the three test runs and calculate and record the total weight. An owner or operator that chooses to demonstrate compliance on the basis of the aluminum production weight must measure the weight of aluminum produced by the emission unit or affected source instead of the feed/charge weight.

(l) *Continuous opacity monitoring system.* The owner or operator of an affected source or emission unit using a continuous opacity monitoring system must conduct a performance evaluation to demonstrate compliance with Performance Specification 1 in appendix B to 40 CFR part 60. Following the performance evaluation, the owner or operator must measure and record the opacity of emissions from each exhaust stack for all consecutive 6-minute periods during the PM emission test.

(m) *Afterburner.* These requirements apply to the owner or operator of an affected source using an afterburner to comply with the requirements of this subpart.

(1) Prior to the initial performance test, the owner or operator must conduct a performance evaluation for the temperature monitoring device according to the requirements of §63.8.

(2) The owner or operator must use these procedures to establish an operating parameter value or range for the afterburner operating temperature.

(i) Continuously measure and record the operating temperature of each afterburner every 15 minutes during the THC and D/F performance tests;

(ii) Determine and record the 15-minute block average temperatures for the three test runs; and

(iii) Determine and record the 3-hour block average temperature measurements for the 3 test runs.

(n) *Inlet gas temperature.* The owner or operator of a scrap dryer/delacquering kiln/decoating kiln or a group 1 furnace using a lime-injected fabric filter must use these procedures to establish an operating parameter value or range for the inlet gas temperature.

(1) Continuously measure and record the temperature at the inlet to the lime-injected fabric filter every 15 minutes during the HCl and D/F performance tests;

(2) Determine and record the 15-minute block average temperatures for the 3 test runs; and

(3) Determine and record the 3-hour block average of the recorded temperature measurements for the 3 test runs.

(o) *Flux injection rate.* The owner or operator must use these procedures to establish an operating parameter value or range for the total reactive chlorine flux injection rate.

(1) Continuously measure and record the weight of gaseous or liquid reactive flux injected for each 15 minute period during the HCl and D/F tests, determine and record the 15-minute block average weights, and calculate and record the total weight of the gaseous or liquid reactive flux for the 3 test runs;

(2) Record the identity, composition, and total weight of each addition of solid reactive flux for the 3 test runs;

(3) Determine the total reactive chlorine flux injection rate by adding the recorded measurement of the total weight of chlorine in the gaseous or liquid reactive flux injected and the total weight of chlorine in the solid reactive flux using Equation 5:

$$W_t = F_1 W_1 + F_2 W_2 \qquad (Eq.\ 5)$$

Where,

W_t= Total chlorine usage, by weight;

F_1= Fraction of gaseous or liquid flux that is chlorine;

W_1= Weight of reactive flux gas injected;

F_2= Fraction of solid reactive chloride flux that is chlorine (*e.g.,* F = 0.75 for magnesium chloride; and

W_2= Weight of solid reactive flux;

(4) Divide the weight of total chlorine usage (W_t) for the 3 test runs by the recorded measurement of the total weight of feed for the 3 test runs; and

(5) If a solid reactive flux other than magnesium chloride is used, the owner or operator must derive the appropriate proportion factor subject to approval by the applicable permitting authority.

(p) *Lime injection.* The owner or operator of an affected source or emission unit using a lime-injected fabric filter system must use these procedures during the HCl and D/F tests to establish an operating parameter value for the feeder setting for each operating cycle or time period used in the performance test.

(1) For continuous lime injection systems, ensure that lime in the feed hopper or silo is free-flowing at all times; and

(2) Record the feeder setting for the 3 test runs. If the feed rate setting varies during the runs, determine and record the average feed rate from the 3 runs.

(q) *Bag leak detection system.* The owner or operator of an affected source or emission unit using a bag leak detection system must submit the information described in §63.1515(b)(6) as part of the notification of compliance status report to document conformance with the specifications and requirements in §63.1510(f).

(r) *Labeling.* The owner or operator of each scrap dryer/delacquering kiln/decoating kiln, group 1 furnace, group 2 furnace and in-line fluxer must submit the information described in §63.1515(b)(3) as part of the notification of compliance status report to document conformance with the operational standard in §63.1506(b).

(s) *Capture/collection system.* The owner or operator of a new or existing affected source or emission unit with an add-on control device must submit the information described in §63.1515(b)(2) as part of the notification of compliance status report to document conformance with the operational standard in §63.1506(c).

[65 FR 15710, Mar. 23, 2000, as amended at 67 FR 79817, Dec. 30, 2002; 69 FR 53984, Sept. 3, 2004]

§ 63.1513 Equations for determining compliance.

(a) *THC emission limit.* Use Equation 6 to determine compliance with an emission limit for THC:

$$E = \frac{C \times MW \times Q \times K_1 \times K_2}{M_V \times P \times 10^6} \qquad (Eq.\ 6)$$

Where,

E = Emission rate of measured pollutant, kg/Mg (lb/ton) of feed;

C = Measured volume fraction of pollutant, ppmv;

MW = Molecular weight of measured pollutant, g/g-mole (lb/lb-mole): THC (as propane) = 44.11;

Q = Volumetric flow rate of exhaust gases, dscm/hr (dscf/hr);

K_1= Conversion factor, 1 kg/1,000 g (1 lb/lb);

K_2= Conversion factor, 1,000 L/m^3 (1 ft^3 /ft^3);

M_v= Molar volume, 24.45 L/g-mole (385.3 ft^3 /lb-mole); and

P = Production rate, Mg/hr (ton/hr).

(b) *PM, HCl and D/F emission limits.* (1) Use Equation 7 of this section to determine compliance with an emission limit for PM or HCl:

$$E=\frac{C\times Q\times K_1}{P} \qquad \text{(Eq. 7)}$$

Where:

E = Emission rate of PM or HCl, kg/Mg (lb/ton) of feed;

C = Concentration of PM or HCl, g/dscm (gr/dscf);

Q = Volumetric flow rate of exhaust gases, dscm/hr (dscf/hr);

K_1= Conversion factor, 1 kg/1,000 g (1 lb/7,000 gr); and

P = Production rate, Mg/hr (ton/hr).

(2) Use Equation 7A of this section to determine compliance with an emission limit for D/F:

$$E=\frac{C\times Q}{P} \qquad \text{(Eq. 7A)}$$

Where:

E = Emission rate of D/F, µg/Mg (gr/ton) of feed;

C = Concentration of D/F, µg/dscm (gr/dscf);

Q = Volumetric flow rate of exhaust gases, dscm/hr (dscf/hr); and

P = Production rate, Mg/hr (ton/hr).

(c) *HCl percent reduction standard.* Use Equation 8 to determine compliance with an HCl percent reduction standard:

$$\%R=\frac{L_i-L_o}{L_i}\times 100 \qquad (Eq.\ 8)$$

Where,

%R = Percent reduction of the control device;

L_i= Inlet loading of pollutant, kg/Mg (lb/ton); and

L_o= Outlet loading of pollutant, kg/Mg (lb/ton).

(d) *Conversion of D/F measurements to TEQ units.* To convert D/F measurements to TEQ units, the owner or operator must use the procedures and equations in "Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-Dioxins and -Dibenzofurans (CDDs and CDFs) and 1989 Update" (EPA–625/3–89–016), incorporated by reference in §63.1502 of this subpart, available from the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, Virginia, NTIS no. PB 90–145756.

(e) *Secondary aluminum processing unit.* Use the procedures in paragraphs (e)(1), (2), and (3) or the procedure in paragraph (e)(4) of this section to determine compliance with emission limits for a secondary aluminum processing unit.

(1) Use Equation 9 to compute the mass-weighted PM emissions for a secondary aluminum processing unit. Compliance is achieved if the mass-weighted emissions for the secondary aluminum processing unit (E_{cPM}) is less than or equal to the emission limit for the secondary aluminum processing unit (L_{cPM}) calculated using Equation 1 in §63.1505(k).

$$E_{C_{PM}} = \frac{\sum_{i=1}^{n}\left(E_{ti_{PM}} \times T_{ti}\right)}{\sum_{i=1}^{n}\left(T_{ti}\right)} \qquad (Eq.\ 9)$$

Where,

E_{cPM}= The mass-weighted PM emissions for the secondary aluminum processing unit;

E_{tiPM}= Measured PM emissions for individual emission unit i;

T_{ti}= The average feed rate for individual emission unit i during the operating cycle or performance test period; and

n=The number of emission units in the secondary aluminum processing unit.

(2) Use Equation 10 to compute the aluminum mass-weighted HCl emissions for the secondary aluminum processing unit. Compliance is achieved if the mass-weighted emissions for the secondary aluminum processing unit (E_{cHCl}) is less than or equal to the emission limit for the secondary aluminum processing unit (L_{cHCl}) calculated using Equation 2 in §63.1505(k).

$$E_{C_{HCl}} = \frac{\sum_{i=1}^{n}\left(E_{ti_{HCl}} \times T_{ti}\right)}{\sum_{i=1}^{n}\left(T_{ti}\right)} \qquad (Eq.\ 10)$$

Where,

E_{cHCl}= The mass-weighted HCl emissions for the secondary aluminum processing unit; and

E_{tiHCl}= Measured HCl emissions for individual emission unit i.

(3) Use Equation 11 to compute the aluminum mass-weighted D/F emissions for the secondary aluminum processing unit. Compliance is achieved if the mass-weighted emissions for the secondary aluminum processing unit is less than or equal to the emission limit for the secondary aluminum processing unit ($L_{cD/F}$) calculated using Equation 3 in §63.1505(k).

$$E_{C_{D/F}} = \frac{\sum_{i=1}^{n}\left(E_{ti_{D/F}} \times T_{ti}\right)}{\sum_{i=1}^{n}\left(T_{ti}\right)} \qquad (Eq.\ 11)$$

Where,

$E_{cD/F}$= The mass-weighted D/F emissions for the secondary aluminum processing unit; and

$E_{tiD/F}$= Measured D/F emissions for individual emission unit i.

(4) As an alternative to using the equations in paragraphs (e)(1), (2), and (3) of this section, the owner or operator may demonstrate compliance for a secondary aluminum processing unit by demonstrating that each existing group 1 furnace is in compliance with the emission limits for a new group 1 furnace in §63.1505(i) and that each existing in-line fluxer is in compliance with the emission limits for a new in-line fluxer in §63.1505(j).

[65 FR 15710, Mar. 23, 2000, as amended at 69 FR 53984, Sept. 3, 2004]

§ 63.1514 [Reserved]

Notifications, Reports, And Records

§ 63.1515 Notifications.

(a) *Initial notifications.* The owner or operator must submit initial notifications to the applicable permitting authority as described in paragraphs (a)(1) through (7) of this section.

(1) As required by §63.9(b)(1), the owner or operator must provide notification for an area source that subsequently increases its emissions such that the source is a major source subject to the standard.

(2) As required by §63.9(b)(3), the owner or operator of a new or reconstructed affected source, or a source that has been reconstructed such that it is an affected source, that has an initial startup after the effective date of this subpart and for which an application for approval of construction or reconstruction is not required under §63.5(d), must provide notification that the source is subject to the standard.

(3) As required by §63.9(b)(4), the owner or operator of a new or reconstructed major affected source that has an initial startup after the effective date of this subpart and for which an application for approval of construction or reconstruction is required by §63.5(d) must provide the following notifications:

(i) Intention to construct a new major affected source, reconstruct a major source, or reconstruct a major source such that the source becomes a major affected source;

(ii) Date when construction or reconstruction was commenced (submitted simultaneously with the application for approval of construction or reconstruction if construction or reconstruction was commenced before the effective date of this subpart, or no later than 30 days after the date construction or reconstruction commenced if construction or reconstruction commenced after the effective date of this subpart);

(iii) Anticipated date of startup; and

(iv) Actual date of startup.

(4) As required by §63.9(b)(5), after the effective date of this subpart, an owner or operator who intends to construct a new affected source or reconstruct an affected source subject to this subpart, or reconstruct a source such that it becomes an affected source subject to this subpart, must provide notification of the intended construction or reconstruction. The notification must include all the information required for an application for approval of construction or reconstruction as required by §63.5(d). For major sources, the application for approval of construction or reconstruction may be used to fulfill these requirements.

(i) The application must be submitted as soon as practicable before the construction or reconstruction is planned to commence (but no sooner than the effective date) if the construction or reconstruction commences after the effective date of this subpart; or

(ii) The application must be submitted as soon as practicable before startup but no later than 90 days after the effective date of this subpart if the construction or reconstruction had commenced and initial startup had not occurred before the effective date.

(5) As required by §63.9(d), the owner or operator must provide notification of any special compliance obligations for a new source.

(6) As required by §63.9(e) and (f), the owner or operator must provide notification of the anticipated date for conducting performance tests and visible emission observations. The owner or operator must notify the Administrator of the intent to conduct a performance test at least 60 days before the performance test is scheduled; notification of opacity or visible emission observations for a performance test must be provided at least 30 days before the observations are scheduled to take place.

(7) As required by §63.9(g), the owner or operator must provide additional notifications for sources with continuous emission monitoring systems or continuous opacity monitoring systems.

(b) *Notification of compliance status report.* Each owner or operator of an existing affected source must submit a notification of compliance status report within 60 days after the compliance date established by §63.1501(a). Each owner or operator of a new affected source must submit a notification of compliance status report within 90 days after conducting the initial performance test required by §63.1511(b), or within 90 days after the compliance date established by §63.1501(b) if no initial performance test is required. The notification must be signed by the responsible official who must certify its accuracy. A complete notification of compliance status report must include the information specified in paragraphs (a)(1) through (10) of this section. The required information may be submitted in an operating permit application, in an amendment to an operating permit application, in a separate submittal, or in any combination. In a State with an approved operating permit program where delegation of authority under section 112(l) of the CAA has not been requested or approved, the owner or operator must provide duplicate notification to the applicable Regional Administrator. If an owner or operator submits the information specified in this section at different times or in different submittals, later submittals may refer to earlier submittals instead of duplicating and resubmitting the information previously submitted. A complete notification of compliance status report must include:

(1) All information required in §63.9(h). The owner or operator must provide a complete performance test report for each affected source and emission unit for which a performance test is required. A complete

performance test report includes all data, associated measurements, and calculations (including visible emission and opacity tests).

(2) The approved site-specific test plan and performance evaluation test results for each continuous monitoring system (including a continuous emission or opacity monitoring system).

(3) Unit labeling as described in §63.1506(b), including process type or furnace classification and operating requirements.

(4) The compliant operating parameter value or range established for each affected source or emission unit with supporting documentation and a description of the procedure used to establish the value (*e.g.,* lime injection rate, total reactive chlorine flux injection rate, afterburner operating temperature, fabric filter inlet temperature), including the operating cycle or time period used in the performance test.

(5) Design information and analysis, with supporting documentation, demonstrating conformance with the requirements for capture/collection systems in §63.1506(c).

(6) If applicable, analysis and supporting documentation demonstrating conformance with EPA guidance and specifications for bag leak detection systems in §63.1510(f).

(7) Manufacturer's specification or analysis documenting the design residence time of no less than 1 second for each afterburner used to control emissions from a scrap dryer/delacquering kiln/decoating kiln subject to alternative emission standards in §63.1505(e).

(8) Manufacturer's specification or analysis documenting the design residence time of no less than 0.8 seconds and design operating temperature of no less than 1,600 °F for each afterburner used to control emissions from a sweat furnace that is not subject to a performance test.

(9) The OM&M plan (including site-specific monitoring plan for each group 1 furnace with no add-on air pollution control device).

(10) Startup, shutdown, and malfunction plan, with revisions.

[65 FR 15710, Mar. 23, 2000, as amended at 67 FR 59793, Sept. 24, 2002; 67 FR 79818, Dec. 30, 2002]

§ 63.1516 Reports.

(a) *Startup, shutdown, and malfunction plan/reports.* The owner or operator must develop a written plan as described in §63.6(e)(3) that contains specific procedures to be followed for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the standard. The owner or operator shall also keep records of each event as required by §63.10(b) and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in §63.6(e)(3). In addition to the information required in §63.6(e)(3), the plan must include:

(1) Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended; and

(2) Corrective actions to be taken in the event of a malfunction of a process or control device, including procedures for recording the actions taken to correct the malfunction or minimize emissions.

(b) *Excess emissions/summary report.* The owner or operator must submit semiannual reports according to the requirements in §63.10(e)(3). Except, the owner or operator must submit the semiannual reports within 60 days after the end of each 6-month period instead of within 30 days after the calendar half as specified in §63.10(e)(3)(v). When no deviations of parameters have occurred, the owner or operator must submit a report stating that no excess emissions occurred during the reporting period.

(1) A report must be submitted if any of these conditions occur during a 6-month reporting period:

(i) The corrective action specified in the OM&M plan for a bag leak detection system alarm was not initiated within 1 hour.

(ii) The corrective action specified in the OM&M plan for a continuous opacity monitoring deviation was not initiated within 1 hour.

(iii) The corrective action specified in the OM&M plan for visible emissions from an aluminum scrap shredder was not initiated within 1 hour.

(iv) An excursion of a compliant process or operating parameter value or range (*e.g.,* lime injection rate or screw feeder setting, total reactive chlorine flux injection rate, afterburner operating temperature, fabric filter inlet temperature, definition of acceptable scrap, or other approved operating parameter).

(v) An action taken during a startup, shutdown, or malfunction was not consistent with the procedures in the plan as described in §63.6(e)(3).

(vi) An affected source (including an emission unit in a secondary aluminum processing unit) was not operated according to the requirements of this subpart.

(vii) A deviation from the 3-day, 24-hour rolling average emission limit for a secondary aluminum processing unit.

(2) Each report must include each of these certifications, as applicable:

(i) For each thermal chip dryer: “Only unpainted aluminum chips were used as feedstock in any thermal chip dryer during this reporting period.”

(ii) For each dross-only furnace: “Only dross and salt flux were used as the charge materials in any dross-only furnace during this reporting period.”

(iii) For each sidewell group 1 furnace with add-on air pollution control devices: “Each furnace was operated such that the level of molten metal remained above the top of the passage between the sidewell and hearth during reactive fluxing, and reactive flux, except for cover flux, was added only to the sidewell or to a furnace hearth equipped with an add-on air pollution control device for PM, HCl, and D/F emissions during this reporting period.”

(iv) For each group 1 melting/holding furnace without add-on air pollution control devices and using pollution prevention measures that processes only clean charge material: “Each group 1 furnace without add-on air pollution control devices subject to emission limits in §63.1505(i)(2) processed only clean charge during this reporting period.”

(v) For each group 2 furnace: “Only clean charge materials were processed in any group 2 furnace during this reporting period, and no fluxing was performed or all fluxing performed was conducted using only nonreactive, non-HAP-containing/non-HAP-generating fluxing gases or agents, except for cover fluxes, during this reporting period.”

(vi) For each in-line fluxer using no reactive flux: “Only nonreactive, non-HAP-containing, non-HAP-generating flux gases, agents, or materials were used at any time during this reporting period.”

(3) The owner or operator must submit the results of any performance test conducted during the reporting period, including one complete report documenting test methods and procedures, process operation, and monitoring parameter ranges or values for each test method used for a particular type of emission point tested.

(c) *Annual compliance certifications.* For the purpose of annual certifications of compliance required by 40 CFR part 70 or 71, the owner or operator must certify continuing compliance based upon, but not limited to, the following conditions:

(1) Any period of excess emissions, as defined in paragraph (b)(1) of this section, that occurred during the year were reported as required by this subpart; and

(2) All monitoring, recordkeeping, and reporting requirements were met during the year.

[65 FR 15710, Mar. 23, 2000, as amended at 69 FR 53984, Sept. 3, 2004; 71 FR 20461, Apr. 20, 2006]

§ 63.1517 Records

(a) As required by §63.10(b), the owner or operator shall maintain files of all information (including all reports and notifications) required by the general provisions and this subpart.

(1) The owner or operator must retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent 2 years of records must be retained at the facility. The remaining 3 years of records may be retained off site.

(2) The owner or operator may retain records on microfilm, computer disks, magnetic tape, or microfiche; and

(3) The owner or operator may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.

(b) In addition to the general records required by §63.10(b), the owner or operator of a new or existing affected source (including an emission unit in a secondary aluminum processing unit) must maintain records of:

(1) For each affected source and emission unit with emissions controlled by a fabric filter or a lime-injected fabric filter:

(i) If a bag leak detection system is used, the number of total operating hours for the affected source or emission unit during each 6-month reporting period, records of each alarm, the time of the alarm, the time corrective action was initiated and completed, and a brief description of the cause of the alarm and the corrective action(s) taken.

(ii) If a continuous opacity monitoring system is used, records of opacity measurement data, including records where the average opacity of any 6-minute period exceeds 5 percent, with a brief explanation of the cause of the emissions, the time the emissions occurred, the time corrective action was initiated and completed, and the corrective action taken.

(iii) If an aluminum scrap shredder is subject to visible emission observation requirements, records of all Method 9 observations, including records of any visible emissions during a 30-minute daily test, with a brief explanation of the cause of the emissions, the time the emissions occurred, the time corrective action was initiated and completed, and the corrective action taken.

(2) For each affected source with emissions controlled by an afterburner:

(i) Records of 15-minute block average afterburner operating temperature, including any period when the average temperature in any 3-hour block period falls below the compliant operating parameter value with a brief explanation of the cause of the excursion and the corrective action taken; and

(ii) Records of annual afterburner inspections.

(3) For each scrap dryer/delacquering kiln/decoating kiln and group 1 furnace, subject to D/F and HCl emission standards with emissions controlled by a lime-injected fabric filter, records of 15-minute block average inlet temperatures for each lime-injected fabric filter, including any period when the 3-hour block average temperature exceeds the compliant operating parameter value +14 °C (+25 °F), with a brief explanation of the cause of the excursion and the corrective action taken.

(4) For each affected source and emission unit with emissions controlled by a lime-injected fabric filter:

(i) Records of inspections at least once every 8-hour period verifying that lime is present in the feeder hopper or silo and flowing, including any inspection where blockage is found, with a brief explanation of the cause of the blockage and the corrective action taken, and records of inspections at least once every 4-hour period for the subsequent 3 days. If flow monitors, pressure drop sensors or load cells are used to verify that lime is present in the hopper and flowing, records of all monitor or sensor output including any event where blockage was found, with a brief explanation of the cause of the blockage and the corrective action taken;

(ii) If lime feeder setting is monitored, records of daily inspections of feeder setting, including records of any deviation of the feeder setting from the setting used in the performance test, with a brief explanation of the cause of the deviation and the corrective action taken.

(iii) If lime addition rate for a noncontinuous lime injection system is monitored pursuant to the approved alternative monitoring requirements in §63.1510(v), records of the time and mass of each lime addition during each operating cycle or time period used in the performance test and calculations of the average lime addition rate (lb/ton of feed/charge).

(5) For each group 1 furnace (with or without add-on air pollution control devices) or in-line fluxer, records of 15-minute block average weights of gaseous or liquid reactive flux injection, total reactive flux injection rate and calculations (including records of the identity, composition, and weight of each addition of gaseous, liquid or solid reactive flux), including records of any period the rate exceeds the compliant operating parameter value and corrective action taken.

(6) For each continuous monitoring system, records required by §63.10(c).

(7) For each affected source and emission unit subject to an emission standard in kg/Mg (lb/ton) of feed/charge, records of feed/charge (or throughput) weights for each operating cycle or time period used in the performance test.

(8) Approved site-specific monitoring plan for a group 1 furnace without add-on air pollution control devices with records documenting conformance with the plan.

(9) Records of all charge materials for each thermal chip dryer, dross-only furnace, and group 1 melting/holding furnaces without air pollution control devices processing only clean charge.

(10) Operating logs for each group 1 sidewell furnace with add-on air pollution control devices documenting conformance with operating standards for maintaining the level of molten metal above the top of the passage between the sidewell and hearth during reactive flux injection and for adding reactive flux only to the sidewell or a furnace hearth equipped with a control device for PM, HCl, and D/F emissions.

(11) For each in-line fluxer for which the owner or operator has certified that no reactive flux was used:

(i) Operating logs which establish that no source of reactive flux was present at the in-line fluxer;

(ii) Labels required pursuant to §63.1506(b) which establish that no reactive flux may be used at the in-line fluxer; or

(iii) Operating logs which document each flux gas, agent, or material used during each operating cycle.

(12) Records of all charge materials and fluxing materials or agents for a group 2 furnace.

(13) Records of monthly inspections for proper unit labeling for each affected source and emission unit subject to labeling requirements.

(14) Records of annual inspections of emission capture/collection and closed vent systems.

(15) Records for any approved alternative monitoring or test procedure.

(16) Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including:

(i) Startup, shutdown, and malfunction plan;

(ii) OM&M plan; and

(iii) Site-specific secondary aluminum processing unit emission plan (if applicable).

(17) For each secondary aluminum processing unit, records of total charge weight, or if the owner or operator chooses to comply on the basis of aluminum production, total aluminum produced for each 24-hour period and calculations of 3-day, 24-hour rolling average emissions.

[65 FR 15710, Mar. 23, 2000, as amended at 67 FR 79818, Dec. 30, 2002]

Other

§ 63.1518 Applicability of general provisions.

The requirements of the general provisions in subpart A of this part that are applicable to the owner or operator subject to the requirements of this subpart are shown in appendix A to this subpart.

§ 63.1519 Implementation and enforcement.

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

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

(c) The authorities that cannot be delegated to State, local, or Tribal agencies are as specified in paragraphs (c)(1) through (4) of this section.

(1) Approval of alternatives to the requirements in §§63.1500 through 63.1501 and 63.1505 through 63.1506.

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

(3) Approval of major alternatives to monitoring under §63.8(f), as defined in §63.90, and as required in this subpart.

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

[68 FR 37359, June 23, 2003]

§ 63.1520 [Reserved]

Table 1 to Subpart RRR of Part 63—Emission Standards for New and Existing Affected Sources

Table 1 to Subpart RRR--Emission Standards for New and Existing Affected Sources

Affected source/ Emission unit	Pollutant	Limit	Units
All new and existing affected sources and emission units that are controlled with a PM add-on control device and that choose to monitor with a COM; and all new and existing aluminum scrap shredders that choose to monitor with a COM or to monitor visible emissions	Opacity	10	percent
New and existing aluminum scrap shredder	PM	0.01	gr/dscf
New and existing thermal chip dryer	THC D/F[a]	0.80 2.50	lb/ton of feed µg TEQ/Mg of feed
New and existing scrap dryer/delacquering kiln/decoating kiln	PM HCl THC D/F[a]	0.08 0.80 0.06 0.25	lb/ton of feed lb/ton of feed lb/ton of feed µg TEQ/Mg of feed
Or			
Alternative limits if afterburner has a design residence time of at least 1 second and operates at a temperature of at least 1400 °F	PM HCl THC D/F[a]	0.30 1.50 0.20 5.0	lb/ton of feed lb/ton of feed lb/ton of feed µg TEQ/Mg of feed
New and existing sweat furnace	D/F[a]	0.80	ng TEQ/dscm @ 11% O_2[b]
New and existing dross-only furnace	PM	0.30	lb/ton of feed

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New and existing in-line fluxer[e]	HCl PM	0.04 0.01	lb/ton of feed lb/ton of feed
New and existing in-line fluxer with no reactive fluxing		No limit	Work practice: no reactive fluxing
New and existing rotary dross cooler	PM	0.04	gr/dscf
New and existing clean furnace (Group 2)		No limit	Work practices: clean charge only and no reactive fluxing
New and existing group 1 melting/holding furnace (processing only clean charge)[f]	PM HCl	0.80 0.40 or 10	lb/ton of feed lb/ton of feed percent of the HCl upstream of an add-on control device
New and existing group 1 furnace[f]	PM HCl	0.40 0.40 or 10	lb/ton of feed lb/ton of feed percent of the HCl upstream of an add-on control device
	D/F[a]	15.0	µg TEQ/Mg of feed
New and existing group 1 furnace[f] with clean charge only	PM HCl	0.40 0.40 Or 10	lb/ton of feed lb/ton of feed percent of the HCl upstream of an add-on control device
	D/F[a]	No Limit	Clean charge only

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New and existing secondary aluminum processing unit[a,d] (consists of all existing group 1 furnaces and existing in-line flux boxes at the facility, or all simultaneously constructed new group 1 furnaces and new in-line fluxers)	PM[e]	$L_{t_{PM}} = \frac{\sum_{i=1}^{n} (L_{i_{PM}} \times T_i)}{\sum_{i=1}^{n} (T_i)}$
	HCl[f]	$L_{t_{HCl}} = \frac{\sum_{i=1}^{n} (L_{i_{HCl}} \times T_i)}{\sum_{i=1}^{n} (T_i)}$
	D/F[g]	$L_{t_{D/F}} = \frac{\sum_{i=1}^{n} (L_{i_{D/F}} \times T_i)}{\sum_{i=1}^{n} (T_i)}$

[a] D/F limit applies to a unit at a major or area source.

[b] Sweat furnaces equipped with afterburners meeting the specifications of §63.1505(f)(1) are not required to conduct a performance test.

[c] These limits are also used to calculate the limits applicable to secondary aluminum processing units.

[d] Equation definitions: L_{iPM} = the PM emission limit for individual emission unit i in the secondary aluminum processing unit [kg/Mg (lb/ton) of feed]; T_i = the feed rate for individual emission unit i in the secondary aluminum processing unit; L_{tPM} = the overall PM emission limit for the secondary aluminum processing unit [kg/Mg (lb/ton) of feed]; L_{iHCl} = the HCl emission limit for individual emission unit i in the secondary aluminum processing unit [kg/Mg (lb/ton) of feed]; L_{tHCl} = the overall HCl emission limit for the secondary aluminum processing unit [kg/Mg (lb/ton) of feed]; $L_{iD/F}$ = the D/F emission limit for individual emission unit i [µg TEQ/Mg (gr TEQ/ton) of feed]; $L_{tD/F}$ = the overall D/F emission limit for the secondary aluminum processing unit [µg TEQ/Mg (gr TEQ/ton) of feed]; n = the number of units in the secondary aluminum processing unit.

[e] In-line fluxers using no reactive flux materials cannot be included in this calculation since they are not subject to the PM limit.

[f] In-line fluxers using no reactive flux materials cannot be included in this calculation since they are not subject to the HCl limit.

[g] Clean charge furnaces cannot be included in this calculation since they are not subject to the D/F limit.

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Table 2 to Subpart RRR of Part 63—Summary of Operating Requirements for New and Existing Affected Sources and Emission Units

Affected	Monitor	Operating requirements

source/emission unit	type/operation/process	
All affected sources and emission units with an add-on air pollution control device	Emission capture and collection system	Design and install in accordance with Industrial Ventilation: A Handbook of Recommended Practice; operate in accordance with OM&M plan.[b]
All affected sources and emission units subject to production-based (lb/ton of feed) emission limits[a]	Charge/feed weight or Production weight	Operate a device that records the weight of each charge; Operate in accordance with OM&M plan.[b]
Group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln	Labeling	Identification, operating parameter ranges and operating requirements posted at affected sources and emission units; control device temperature and residence time requirements posted at scrap dryer/delacquering kiln/decoating kiln.
Aluminum scrap shredder with fabric filter	Bag leak detector or	Initiate corrective action within 1-hr of alarm and complete in accordance with OM&M plan[b]; operate such that alarm does not sound more than 5% of operating time in 6-month period.
	COM or	Initiate corrective action within 1-hr of a 6-minute average opacity reading of 5% or more and complete in accordance with OM&M plan.[b]
	VE	Initiate corrective action within 1-hr of any observed VE and complete in accordance with the OM&M plan.[b]
Thermal chip dryer with afterburner	Afterburner operating temperature	Maintain average temperature for each 3-hr period at or above average operating temperature during the performance test.
	Afterburner operation	Operate in accordance with OM&M plan.[b]
	Feed material	Operate using only unpainted aluminum chips.
Scrap dryer/delacquering kiln/decoating kiln with afterburner and lime-	Afterburner operating temperature	Maintain average temperature for each 3-hr period at or above average operating temperature during the

injected fabric filter		performance test.
	Afterburner operation	Operate in accordance with OM&M plan.[b]
	Bag leak detector or	Initiate corrective action within 1-hr of alarm and complete in accordance with the OM&M plan;[b]operate such that alarm does not sound more than 5% of operating time in 6-month period.
	COM	Initiate corrective action within 1-hr of a 6-minute average opacity reading of 5% or more and complete in accordance with the OM&M plan.[b]
	Fabric filter inlet temperature	Maintain average fabric filter inlet temperature for each 3-hr period at or below average temperature during the performance test +14 °C (+25 °F).
	Lime injection rate	Maintain free-flowing lime in the feed hopper or silo at all times for continuous injection systems; maintain feeder setting at level established during the performance test for continuous injection systems.
Sweat furnace with afterburner	Afterburner operating temperature	If a performance test was conducted, maintain average temperature for each 3-hr period at or above average operating temperature during the performance test; if a performance test was not conducted, and afterburner meets specifications of §63.1505(f)(1), maintain average temperature for each 3-hr period at or above 1600 °F.
	Afterburner operation	Operate in accordance with OM&M plan.[b]
Dross-only furnace with fabric filter	Bag leak detector or	Initiate corrective action within 1-hr of alarm and complete in accordance with the OM&M plan;[b]operate such that alarm does not sound more than 5% of operating time in 6-month period.

	COM	Initiate corrective action within 1-hr of a 6-minute average opacity reading of 5% or more and complete in accordance with the OM&M plan.[b]
	Feed/charge material	Operate using only dross as the feed material.
Rotary dross cooler with fabric filter	Bag leak detector or	Initiate corrective action within 1-hr of alarm and complete in accordance with the OM&M plan;[b]operate such that alarm does not sound more than 5% of operating time in 6-month period.
	COM	Initiate corrective action within 1-hr of a 6-minute average opacity reading of 5% or more and complete in accordance with the OM&M plan.[b]
In-line fluxer with lime-injected fabric filter (including those that are part of a secondary aluminum processing unit)	Bag leak detector or	Initiate corrective action within 1-hr of alarm and complete in accordance with the OM&M plan;[b]operate such that alarm does not sound more than 5% of operating time in 6-month period.
	COM	Initiate corrective action within 1-hr of a 6-minute average opacity reading of 5% or more and complete in accordance with the OM&M plan.[b]
	Lime injection rate	Maintain free-flowing lime in the feed hopper or silo at all times for continuous injection systems; maintain feeder setting at level established during performance test for continuous injection systems.
	Reactive flux injection rate	Maintain reactive flux injection rate at or below rate used during the performance test for each operating cycle or time period used in the performance test.
In-line fluxer (using no reactive flux material)	Flux materials	Use no reactive flux.
Group 1 furnace with	Bag leak detector or	Initiate corrective action within 1-hr

lime-injected fabric filter (including those that are part of a secondary of aluminum processing unit).		of alarm; operate such that alarm does not sound more than 5% of operating time in 6-month period; complete corrective action in accordance with the OM&M plan.[b]
	COM	Initiate corrective action within 1-hr of a 6-minute average opacity reading of 5% or more; complete corrective action in accordance with the OM&M plan.[b]
	Fabric filter inlet temperature	Maintain average fabric filter inlet temperature for each 3-hour period at or below average temperature during the performance test +14 °C (+25 °F).
	Reactive flux injection rate	Maintain reactive flux injection rate (kg/Mg) (lb/ton) at or below rate used during the performance test for each furnace cycle.
	Lime injection rate	Maintain free-flowing lime in the feed hopper or silo at all times for continuous injection systems; maintain feeder setting at level established at performance test for continuous injection systems.
	Maintain molten aluminum level	Operate sidewell furnaces such that the level of molten metal is above the top of the passage between sidewell and hearth during reactive flux injection, unless the hearth is also controlled.
	Fluxing in sidewell furnace hearth	Add reactive flux only to the sidewell of the furnace unless the hearth is also controlled.
Group 1 furnace without add-on controls (including those that are part of a secondary aluminum processing unit)	Reactive flux injection rate	Maintain reactive flux injection rate (kg/Mg) (lb/ton) at or below rate used during the performance test for each operating cycle or time period used in the performance test.
	Site-specific monitoring plan[c]	Operate furnace within the range of charge materials, contaminant levels,

		and parameter values established in the site-specific monitoring plan.
	Feed material (melting/holding furnace)	Use only clean charge.
Clean (group 2) furnace	Charge and flux materials	Use only clean charge. Use no reactive flux.

[a]Thermal chip dryers, scrap dryers/delacquering kilns/decoating kilns, dross-only furnaces, in-line fluxers and group 1 furnaces including melting/holding furnaces.

[b]OM&M plan—Operation, maintenance, and monitoring plan.

[c]Site-specific monitoring plan. Owner/operators of group 1 furnaces without control devices must include a section in their OM&M plan that documents work practice and pollution prevention measures, including procedures for scrap inspection, by which compliance is achieved with emission limits and process or feed parameter-based operating requirements. This plan and the testing to demonstrate adequacy of the monitoring plan must be developed in coordination with and approved by the permitting authority.

[65 FR 15710, Mar. 23, 2000, as amended at 67 FR 79818, Dec. 30, 2002; 69 FR 53984, Sept. 3, 2004]

Table 3 to Subpart RRR of Part 63—Summary of Monitoring Requirements for New and Existing Affected Sources and Emission Units

Affected source/Emission unit	Monitor type/Operation/Process	Monitoring requirements
All affected sources and emission units with an add-on air pollution control device	Emission capture and collection system	Annual inspection of all emission capture, collection, and transport systems to ensure that systems continue to operate in accordance with ACGIH standards.
All affected sources and emission units subject to production-based (lb/ton of feed/charge) emission limits[a]	Feed/charge weight	Record weight of each feed/charge, weight measurement device or other procedure accuracy of ±1%[b]; calibrate according to manufacturers specifications, or at least once every 6 months.
Group 1 furnace, group 2 furnace, in-line fluxer, and scrap dryer/delacquering kiln/decoating kiln	Labeling	Check monthly to confirm that labels are intact and legible.
Aluminum scrap	Bag leak detector or	Install and operate in accordance

shredder with fabric filter		with "Fabric Filter Bag Leak Detection Guidance"[c]; record voltage output from bag leak detector.
	COM or	Design and install in accordance with PS–1; collect data in accordance with subpart A of 40 CFR part 63; determine and record 6-minute block averages.
	VE	Conduct and record results of 30-minute daily test in accordance with Method 9.
Thermal chip dryer with afterburner	Afterburner operating temperature	Continuous measurement device to meet specifications in §63.1510(g)(1); record average temperature for each 15-minute block; determine and record 3-hr block averages.
	Afterburner operation	Annual inspection of afterburner internal parts; complete repairs in accordance with the OM&M plan.
	Feed/charge material	Record identity of each feed/charge; certify feed/charge materials every 6 months.
Scrap dryer/delacquering kiln/decoating kiln with afterburner and lime-injected fabric filter	Afterburner operating temperature.	Continuous measurement device to meet specifications in §63.1510(g)(1); record temperature for each 15-minute block; determine and record 3-hr block averages.
	Afterburner operation	Annual inspection of afterburner internal parts; complete repairs in accordance with the OM&M plan.
	Bag leak detector or	Install and operate in accordance with "Fabric Filter Bag Leak Detection Guidance[c]; record voltage output from bag leak detector.
	COM	Design and Install in accordance with PS–1; collect data in accordance with subpart A of 40

		CFR part 63; determine and record 6-minute block averages.
	Lime injection rate	For continuous injection systems, inspect each feed hooper or silo every 8 hours to verify that lime is free flowing; record results of each inspection. If blockage occurs, inspect every 4 hours for 3 days; return to 8-hour inspections if corrective action results in no further blockage during 3-day period, record feeder setting daily.
	Fabric filter inlet temperature.	Continous measurement device to meet specifications in §63.1510(h)(2); record temperatures in 15-minute block averages; determine and record 3-hr block averages.
Sweat furnace with afterburner	Afterburner operating temperature	Continuous measurement device to meet specifications in §63.1510(g)(1); record temperatures in 15-minute block averages; determine and record 3-hr block averages.
	Afterburner operation	Annual inspection of afterburner internal parts; complete repairs in accordance with the OM&M plan.
Dross-only furnace with fabric filter	Bag leak detector or	Install and operate in accordance with “Fabric Filter Bag Leak Detection Guidance”[c]; record output voltage from bag leak detector.
	COM	Design and install in accordance with PS–1; collect data in accordance with subpart A of 40 CFR part 63; determine and record 6-minute block averages.
	Feed/charge material	Record identity of each feed/charge; certify charge materials every 6 months.
Rotary dross cooler with	Bag leak detector or	Install and operate in accordance

fabric filter		with “Fabric Filter Bag Leak Detection Guidance”[c]; record output voltage from bag leak detector.
	COM	Design and install in accordance with PS–1; collect data in accordance with subpart A of 40 CFR part 63; determine and record 6-minute block averages.
In-line fluxer with lime-injected fabric filter	Bag leak detector or	Install and operate in accordance with “Fabric Filter Bag Leak Detection Guidance”[c]; record output voltage from bag leak detector.
	COM	Design and install in accordance with PS–1; collect data in accordance with subpart A of 40 CFR part 63; determine and record 6-minute block averages
	Reactive flux injection rate	Weight measurement device accuracy of ±1%[b]; calibrate according to manufacturer's specifications or at least once every 6 months; record time, weight and type of reactive flux added or injected for each 15-minute block period while reactive fluxing occurs; calculate and record total reactive flux injection rate for each operating cycle or time period used in performance test; or Alternative flux injection rate determination procedure per §63.1510(j)(5).
	Lime injection rate	For continuous injection systems, record feeder setting daily and inspect each feed hopper or silo every 8 hrs to verify that lime is free-flowing; record results of each inspection. If blockage occurs, inspect every 4 hrs for 3 days; return to 8-hour inspections if corrective action results in no further blockage during 3-day period.[d]

In-line fluxer using no reactive flux	Flux materials	Record flux materials; certify every 6 months for no reactive flux.
Group 1 furnace with lime-injected fabric filter	Bag leak detector or	Install and operate in accordance with "Fabric Filter Bag Leak Detection Guidance"[c]; record output voltage from bag leak detector.
	COM	Design and install in accordance with PS–1; collect data in accordance with subpart A of 40 part CFR 63; determine and record 6-minute block averages.
	Lime injection rate	For continuous injection systems, record feeder setting daily and inspect each feed hopper or silo every 8 hours to verify that lime is free-flowing; record results of each inspection. If blockage occurs, inspect every 4 hours for 3 days; return to 8-hour inspections if corrective action results in no further blockage during 3-day period.[d]
	Reactive flux injection rate	Weight measurement device accuracy of ±1%[b]; calibrate every 3 months; record weight and type of reactive flux added or injected for each 15-minute block period while reactive fluxing occurs; calculate and record total reactive flux injection rate for each operating cycle or time period used in performance test; or Alternative flux injection rate determination procedure per §63.1510(j)(5).
	Fabric filter inlet temperature	Continuous measurement device to meet specifications in §63.1510(h)(2); record temperatures in 15-minute block averages; determine and record 3-hour block averages.
	Maintain molten	Maintain aluminum level operating

	aluminum level in sidewell furnace	log; certify every 6 months.
Group 1 furnace without add-on controls	Fluxing in sidewell furnace hearth	Maintain flux addition operating log; certify every 6 months.
	Reactive flux injection rate	Weight measurement device accuracy of +1%[b]; calibrate according to manufacturers specifications or at least once every six months; record weight and type of reactive flux added or injected for each 15-minute block period while reactive fluxing occurs; calculate and record total reactive flux injection rate for each operating cycle or time period used in performance test.
	OM&M plan (approved by permitting agency)	Demonstration of site-specific monitoring procedures to provide data and show correlation of emissions across the range of charge and flux materials and furnace operating parameters.
	Feed material (melting/holding furnace)	Record type of permissible feed/charge material; certify charge materials every 6 months.
Clean (group 2) furnace	Charge and flux materials	Record charge and flux materials; certify every 6 months for clean charge and no reactive flux.

[a]Thermal chip dryers, scrap dryers/delacquering kilns/decoating kilns, dross-only furnaces, in-line fluxers and group 1 furnaces or melting/holding furnaces.

[b]Permitting agency may approve measurement devices of alternative accuracy, for example in cases where flux rates are very low and costs of meters of specified accuracy are prohibitive; or where feed/charge weighing devices of specified accuracy are not practicable due to equipment layout or charging practices.

[c]Non-triboelectric bag leak detectors must be installed and operated in accordance with manufacturers' specifications.

[d]Permitting agency may approve other alternatives including load cells for lime hopper weight, sensors for carrier gas pressure, or HCl monitoring devices at fabric filter outlet.

[65 FR 15710, Mar. 23, 2000, as amended at 69 FR 53985, Sept. 3, 2004]

Appendix A to Subpart RRR of Part 63—General Provisions Applicability to Subpart RRR

Citation	Requirement	Applies to RRR	Comment
§63.1(a)(1)–(4)	General Applicability	Yes.	
§63.1(a)(5)		No	[Reserved].
§63.1(a)(6)–(8)		Yes.	
§63.1(a)(9)		No	[Reserved].
§63.1(a) (10)–(14)		Yes.	
§63.1(b)	Initial Applicability Determination	Yes	EPA retains approval authority.
§63.1(c)(1)	Applicability After Standard Established	Yes.	
§63.1(c)(2)		Yes	§63.1500(e) exempts area sources subject to this subpart from the obligation to obtain Title V operating permits.
§63.1(c)(3)		No	[Reserved].
§63.1(c)(4)–(5)		Yes.	
§63.1(d)		No	[Reserved].
§63.1(e)	Applicability of Permit Program	Yes.	
§63.2	Definitions	Yes	Additional definitions in §63.1503.
§63.3	Units and Abbreviations	Yes	
§63.4(a)(1)–(3)	Prohibited Activities	Yes.	
§63.4(a)(4)		No	[Reserved]
§63.4(a)(5)		Yes.	
§63.4(b)–(c)	Circumvention/ Severability	Yes.	
§63.5(a)	Construction and	Yes.	

	Reconstruction—Applicability		
§63.5(b)(1)	Existing, New, Reconstructed Sources—Requirements	Yes.	
§63.5(b)(2)		No	[Reserved].
§63.5(b)(3)–(6)		Yes.	
§63.5(c)		No	[Reserved].
§63.5(d)	Application for Approval of Construction/ Reconstruction	Yes.	
§63.5(e)	Approval of Construction/ Reconstruction	Yes.	
§63.5(f)	Approval of Construction/Reconstruction Based on State Review	Yes.	
§63.6(a)	Compliance with Standards and Maintenance—Applicability	Yes.	
§63.6(b)(1)–(5)	New and Reconstructed Sources—Dates	Yes.	
§63.6(b)(6)		No	[Reserved].
§63.6(b)(7)		Yes.	
§63.6(c)(1)	Existing Sources Dates	Yes	§63.1501 specifies dates.
§63.6(c)(2)		Yes.	
§63.6(c)(3)–(4)		No	[Reserved].
§63.6(c)(5)		Yes.	
§63.6(d)		No	[Reserved].
§63.6(e)(1)–(2)	Operation & Maintenance Requirements	Yes	§63.1510 requires plan.
§63.6(e)(3)	Startup, Shutdown, and Malfunction Plan	Yes.	
§63.6(f)	Compliance with Emission Standards	Yes.	
§63.6(g)	Alternative Standard	No	

§63.6(h)	Compliance with Opacity/VE Standards	Yes.	
§63.6(i)(1)–(14)	Extension of Compliance	Yes.	
§63.6(i)(15)		No	[Reserved].
§63.6(i)(16)		Yes.	
§63.6(j)	Exemption from Compliance	Yes.	
§63.7(a)–(h)	Performance Test Requirements-Applicability and Dates	Yes	Except §63.1511 establishes dates for initial performance tests.
§63.7(b)	Notification	Yes.	
§63.7(c)	Quality Assurance/Test Plan	Yes.	
§63.7(d)	Testing Facilities	Yes.	
§63.7(e)	Conduct of Tests	Yes.	
§63.7(f)	Alternative Test Method	Yes.	
§63.7(g)	Data Analysis	Yes.	
§63.7(h)	Waiver of Tests	Yes.	
§63.8(a)(1)	Monitoring Requirements—Applicability	Yes.	
§63.8(a)(2)		Yes.	
§63.8(a)(3)		No	[Reserved]
§63.8(a)(4)		Yes	
§63.8(b)	Conduct of Monitoring	Yes.	
§63.8(c)(1)–(3)	CMS Operation and Maintenance	Yes.	
§63.8(c)(4)–(8)		Yes.	
§63.8(d)	Quality Control	Yes.	
§63.8(e)	CMS Performance Evaluation	Yes.	
§63.8(f)(1)–(5)	Alternative Monitoring Method	No	§63.1510(w) includes provisions for monitoring alternatives.
§63.8(f)(6)	Alternative to RATA Test	Yes.	

§63.8(g)(1)	Data Reduction	Yes.	
§63.8(g)(2)		No	§63.1512 requires five 6-minute averages for an aluminum scrap shredder.
§63.8(g)(3)–(5)		Yes.	
§63.9(a)	Notification Requirements—Applicability	Yes.	
§63.9(b)	Initial Notifications	Yes.	
§63.9(c)	Request for Compliance Extension	Yes.	
§63.9(d)	New Source Notification for Special Compliance Requirements	Yes.	
63.9(e)	Notification of Performance Test	Yes.	
§63.9(f)	Notification of VE/Opacity Test	Yes.	
§63.9(g)	Additional CMS Notifications	Yes.	
§63.9(h)(1)–(3)	Notification of Compliance Status	Yes	Except §63.1515 establishes dates for notification of compliance status reports.
§63.9(h)(4)		No	[Reserved].
§63.9(h)(5)–(6)		Yes.	
§63.9(i)	Adjustment of Deadlines	Yes.	
§63.9(j)	Change in Previous Information	Yes.	
§63.10(a)	Recordkeeping/Reporting—Applicability	Yes.	
§63.10(b)	General Requirements	Yes	§63.1517 includes additional requirements.
§63.10(c)(1)	Additional CMS Recordkeeping	Yes.	
§63.10(c)(2)–		No	[Reserved].

(4)			
§63.10(c)(5)		Yes.	
§63.10(c)(6)		Yes.	
§63.10(c)(7)–(8)		Yes.	
§63.10(c)(9)		No	[Reserved].
§63.10(c)(10)–(13)		Yes.	
§63.10(c)(14)		Yes.	
§63.10(d)(1)	General Reporting Requirements	Yes.	
§63.10(d)(2)	Performance Test Results	Yes.	
§63.10(d)(3)	Opacity or VE Observations	Yes.	
§63.10(d)(4)–(5)	Progress Reports/Startup, Shutdown, and Malfunction Reports	Yes.	
§63.10(e)(1)–(2)	Additional CMS Reports	Yes.	
§63.10(e)(3)	Excess Emissions/CMS Performance Reports	Yes	Reporting deadline given in §63.1516.
§63.10(e)(4)	COMS Data Reports	Yes.	
§63.10(f)	Recordkeeping/Reporting Waiver	Yes.	
§63.11(a)–(b)	Control Device Requirements	No	Flares not applicable.
§63.12(a)–(c)	State Authority and Delegations	Yes.	EPA retains authority for applicability determinations.
§63.13	Addresses	Yes.	
§63.14	Incorporation by Reference	Yes	Chapters 3 and 5 of ACGIH Industrial Ventilation Manual for capture/collection systems; and Interim Procedures for Estimating Risk Associated with Exposure to Mixtures of Chlorinated Dibenzofurans (CDDs and CDFs) and 1989 Update (incorporated

			by reference in §63.1502).
§63.15	Availability of Information/Confidentiality	Yes.	

[65 FR 15710, Mar. 23, 2000, as amended at 67 FR 59793, Sept. 24, 2002; 67 FR 79818, Dec. 30, 2002; 69 FR 53986, Sept. 3, 2004; 70 FR 75346, Dec. 19, 2005]

Part 70 Operating Permit Renewal
OFFICE OF AIR QUALITY

General Motors LLC
105 GM Drive
Bedford, IN 47421

Attachment B

Title 40: Protection of Environment

Part 63 - National Emission Standards for Hazardous Air Pollutants

Subpart ZZZZ—Stationary Reciprocating Internal Combustion Engines

T093-26058-00007

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(h) 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) A stationary RICE which is an existing spark ignition 4 stroke rich burn (4SRB) stationary RICE located at an area source of HAP emissions; an existing spark ignition 4SRB stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions; an existing spark ignition 2 stroke lean burn (2SLB) stationary RICE; an existing spark ignition 4 stroke lean burn (4SLB) stationary RICE; an existing compression ignition emergency stationary RICE with a site rating of more than 500 brake

HP located at a major source of HAP emissions; an existing spark ignition emergency or limited use stationary RICE; an existing limited use stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions; an existing stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis; or an existing stationary residential, commercial, or institutional emergency stationary RICE located at an area source of HAP emissions, does not have to meet the requirements of this subpart and of subpart A of this part. No initial notification is necessary.

(c) *Stationary RICE subject to Regulations under 40 CFR Part 60.* An affected source that is a new or reconstructed stationary RICE located at an area source, or is a new or reconstructed stationary RICE located at a major source of HAP emissions and is a spark ignition 2 stroke lean burn (2SLB) stationary RICE with a site rating of less than 500 brake HP, a spark ignition 4 stroke lean burn (4SLB) stationary RICE with a site rating of less than 250 brake HP, or a 4 stroke rich burn (4SRB) stationary RICE with a site rating of less than or equal to 500 brake HP, a stationary RICE with a site rating of less than or equal to 500 brake HP which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, an emergency or limited use stationary RICE with a site rating of less than or equal to 500 brake HP, or a compression ignition (CI) stationary RICE with a site rating of less than or equal to 500 brake HP, 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.

[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]

§ 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.

(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]

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 4SLB stationary RICE with a site rating of greater than or equal to 250 brake HP and less 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. 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]

§ 63.6602 What emission limitations must I meet if I own or operate an existing stationary CI 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 CI 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 9675, Mar. 3, 2010]

§ 63.6603 What emission limitations and operating limitations must I meet if I own or operate an existing stationary CI 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 CI RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to this subpart and the operating limitations in Table 2b to this subpart which 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]

§ 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 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 9675, Mar. 3, 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 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]

§ 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 CI 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 CI 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]

§ 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_2concentration is measured in lieu of oxygen concentration measurement, a CO_2correction factor is needed. Calculate the CO_2correction 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_2at 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_2concentration.

(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 §63.8.

(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 an existing stationary RICE with a site rating of less than 100 brake HP located at a major source of HAP emissions, an existing stationary emergency RICE, or an existing stationary RICE located at an area source of HAP emissions not subject to any numerical emission standards shown in Table 2d to this subpart, 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.

(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 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) in 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 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 engine that is subject to the work, operation or management practices in items 1, 2, or 4 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 before continuing to use the engine. 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]

§ 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, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), you must monitor continuously at all times that the stationary RICE is operating.

(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.

§ 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) 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 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 engine according to the conditions described in paragraphs (f)(1) through (4) of this section.

(1) For owners and operators of emergency engines, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as permitted in this section, is prohibited.

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

(3) 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.

(4) 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)(4), as long as the power provided by the financial arrangement is limited to emergency power.

[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]

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 CI 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 CI 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 CI RICE less than 100 HP, an existing stationary emergency CI RICE, or an existing stationary CI 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]

§ 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 CI RICE with a site rating of less than 100 brake HP located at a major source of HAP emissions.

(2) An existing stationary emergency CI RICE.

(3) An existing stationary CI 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 CI 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 CI 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]

§ 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).

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 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 for peak shaving are not considered emergency stationary ICE. Stationary CI ICE 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). Emergency stationary RICE with a site-rating of more than 500 brake HP located at a major source of HAP emissions that were installed prior to June 12, 2006, may be operated 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. Emergency stationary RICE with a site-rating of more than 500 brake HP located at a major source of HAP emissions that were installed prior to June 12, 2006, may also operate an additional 50 hours per year in non-emergency situations. All other emergency stationary RICE must comply with the requirements specified in §63.6640(f).

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.

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/commercial/institutional emergency stationary RICE means an emergency stationary RICE used in residential establishments such as homes or residences, commercial establishments such as office buildings, hotels, or stores, or institutional establishments such as medical centers, research centers, and institutions of higher education.

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 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]

Table1ato 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 for existing, new and reconstructed 4SRB 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. 4SRB stationary RICE	a. Reduce formaldehyde emissions by 76 percent or more. If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004, you may reduce formaldehyde emissions by 75 percent or more until June 15, 2007 or	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.[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]

Table1bto 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

[As stated in §§63.6600, 63.6630 and 63.6640, you must comply with the following operating emission limitations for existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions]

For each...	You must meet the following operating limitation...
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	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
4SRB stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent $O_2$and using NSCR.	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	Comply with any operating limitations approved by the Administrator.
4SRB stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent $O_2$and not using NSCR.	

[73 FR 3607, Jan. 18, 2008]

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

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

For each . . .	You must meet the following emission limitation, except during periods of startup . . .	During periods of startup you must . . .
1. 2SLB stationary	a. Reduce CO emissions by 58 percent or more; or	Minimize the engine's time spent at idle and minimize the engine's

RICE	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	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 2b to Subpart ZZZZ of Part 63—Operating Limitations for New and Reconstructed 2SLB and Compression Ignition Stationary RICE >500 HP Located at a Major Source of HAP Emissions, Existing Non-Emergency Compression Ignition Stationary RICE >500 HP, and New and Reconstructed 4SLB Burn Stationary RICE ≥250 HP Located at a Major Source of HAP Emissions

As stated in §§63.6600, 63.6601, 63.6630, and 63.6640, you must comply with the following operating limitations for new and reconstructed lean burn and existing, new and reconstructed compression ignition stationary RICE:

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	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

concentration of formaldehyde in the stationary RICE exhaust and using an oxidation catalyst	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	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 9680, Mar. 3, 2010]

Table 2c to Subpart ZZZZ of Part 63—Requirements for Existing Compression Ignition Stationary Rice Located at Major Sources of HAP Emissions

As stated in §§63.6600 and 63.6640, you must comply with the following requirements for existing compression ignition stationary RICE:

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
1. Emergency CI and black start CI.[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	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]

	replace as necessary.[3]	
2. Non-Emergency, non-black start CI < 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 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 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 CI>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.	

[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 9681, Mar. 3, 2010]

Table 2d to Subpart ZZZZ of Part 63—Requirements for Existing Compression Ignition Stationary RICE Located at Area Sources of HAP Emissions

As stated in §§63.6600 and 63.6640, you must comply with the following emission and operating limitations for existing compression ignition stationary RICE:

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 ≤ 300 HP	a. Change oil and filter every 1,000 hours of operation or annually, whichever comes first;[1]	
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first;	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.
	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 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 > 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 CI and black start CI.[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	

[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 9681, Mar. 3, 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. 2SLB and 4SLB stationary RICE with a brake horsepower >500 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	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	Limit or reduce CO or formaldehyde emissions	Conduct subsequent performance tests every 8,760 hrs or 3 years, whichever comes first.
5. Existing non-emergency, non-black start CI stationary RICE with a brake horsepower >500 that are limited use stationary RICE		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 9682, Mar. 3, 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 existing sources:

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)[a,b](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 points; and	(1) Method 1 or 1A of 40 CFR part 60, appendix A §63.7(d)(1)(i)	(a) Sampling sites must be located at the inlet and outlet of the control device.
		ii. Measure O_2 at the inlet and outlet of the control device; and	(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A, or ASTM Method D6522–00 (2005)	(a) Measurements to determine O_2 concentration must be made at the same time as the measurements for formaldehyde concentration.
		iii. Measure moisture content at the inlet and outlet of the control device; and	(1) Method 4 of 40 CFR part 60, appendix A, or Test Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03	(a) Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde concentration.
		iv. Measure formaldehyde at the inlet and the outlet of the control device.	(1) Method 320 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	i. Select the sampling port location and the	(1) Method 1 or 1A of 40 CFR part 60, appendix	(a) If using a control device, the sampling site must be located at the

	formaldehyde or CO in the stationary RICE exhaust	number of traverse points; and	A §63.7(d)(1)(i)	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 moisture content of the stationary RICE exhaust at the sampling port location; and	(1) Method 4 of 40 CFR part 60, appendix A, or Test Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03	(a) Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde concentration.
		iv. Measure formaldehyde at the exhaust of the stationary RICE; or	(1) Method 320 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	(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.

			part 63, appendix A, or ASTM D6348–03	

[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 9682, Mar. 3, 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. 2SLB and 4SLB stationary RICE >500 HP located at a major source and new or reconstructed CI stationary RICE >500 HP located at a major source	a. Reduce CO emissions and using oxidation catalyst, and using a CPMS	i. The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and
		ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and
		iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
2. 2SLB and 4SLB stationary RICE >500 HP located at a major source and new or reconstructed CI stationary RICE >500 HP located at a	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

major source		
		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.
3. 2SLB and 4SLB stationary RICE >500 HP located at a major source and new or reconstructed CI stationary RICE >500 HP located at a major source	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.
4. 4SRB stationary RICE >500 HP located at a major source	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.
5. 4SRB stationary RICE >500 HP located at a major source	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.
6. Stationary RICE >500 HP located at a major source	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.
7. Stationary RICE >500 HP located at a major source	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.
8. Existing stationary non-emergency RICE ≥100 HP located at a major source, existing non-emergency CI stationary RICE >500 HP, and existing stationary non-emergency RICE ≥100 HP located at an area source	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.
9. Existing stationary non-emergency RICE ≥100 HP located at a major source, existing non-emergency CI stationary RICE >500 HP, and existing stationary non-emergency RICE ≥100 HP located at an area source	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.

[75 FR 9684, Mar. 3, 2010]

Table 6 to Subpart ZZZZ of Part 63—Continuous Compliance With Emission Limitations and Operating Limitations

As stated in §63.6640, you must continuously comply with the emissions and operating limitations as required by the following:

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
1. 2SLB and 4SLB stationary RICE >500 HP located at a major source and CI stationary RICE >500 HP located at a major source	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. 2SLB and 4SLB stationary RICE >500 HP located at a major source and CI stationary RICE >500 HP located at a major source	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
		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. 2SLB and 4SLB stationary RICE >500 HP located at a major source and CI stationary RICE >500 HP located at a major source	a. Reduce CO emissions 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 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; 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. 4SRB stationary RICE >500 HP located at a major source	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. 4SRB stationary RICE >500 HP located at a major source	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. 4SRB stationary RICE with a brake HP ≥5,000 located at a major source	Reduce formaldehyde emissions	Conducting semiannual performance tests for formaldehyde to demonstrate that the required formaldehyde percent reduction is achieved.[a]
7. Stationary RICE >500 HP located at a major source	Limit the concentration of formaldehyde in the stationary RICE exhaust and using	i. Conducting semiannual performance tests for formaldehyde to demonstrate that your emissions remain at or below the formaldehyde concentration limit[a]; and

	oxidation catalyst or NSCR	
		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. Stationary RICE >500 HP located at a major source	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
		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 stationary CI RICE not subject to any numerical emission limitations	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 RICE >500 HP that are not limited use stationary RICE, except 4SRB >500 HP located at major sources	a. Reduce CO or formaldehyde emissions; or b. Limit the concentration of formaldehyde or CO in the stationary RICE exhaust	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.
11. Existing limited use stationary RICE >500 HP that are limited use CI stationary RICE	a. Reduce CO or formaldehyde emissions; or b. Limit the concentration of formaldehyde or CO in the stationary RICE exhaust	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.

[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.

[75 FR 9685, Mar. 3, 2010]

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:

You must submit a(n) . . .	The report must contain . . .	You must submit the report . . .
1. 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	i. Semiannually according to the requirements in §63.6650(b)(1)–(5) for engines that are not limited use stationary CI RICE subject to numerical emission limitations; and ii. Annually according to the requirements in §63.6650(b)(6)–(9) for

	during which the CMS was out-of-control during the reporting period; or	engines that are limited use stationary CI RICE subject to numerical emission limitations.
	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	i. Semiannually according to the requirements in §63.6650(b).
	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).
2. 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 provided by landfill gas or digester gas, is equivalent to 10 percent or more of the gross heat input on an annual basis; and	i. Annually, according to the requirements in §63.6650.
	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 9687, Mar. 3, 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 sources	Yes.	
§63.6(c)(3)–(4)	[Reserved]		
§63.6(c)(5)	Compliance dates for existing area sources that become major sources	Yes.	
§63.6(d)	[Reserved]		
§63.6(e)	Operation and maintenance	No.	
§63.6(f)(1)	Applicability of standards	No.	
§63.6(f)(2)	Methods for determining compliance	Yes.	
§63.6(f)(3)	Finding of compliance	Yes.	
§63.6(g)(1)–(3)	Use of alternate standard	Yes.	
§63.6(h)	Opacity and visible emission standards	No	Subpart ZZZZ does not contain opacity or visible emission standards.
§63.6(i)	Compliance extension procedures and criteria	Yes.	

§63.6(j)	Presidential compliance exemption	Yes.	
§63.7(a)(1)–(2)	Performance test dates	Yes	Subpart ZZZZ contains performance test dates at §§63.6610, 63.6611, and 63.6612.
§63.7(a)(3)	CAA section 114 authority	Yes.	
§63.7(b)(1)	Notification of performance test	Yes	Except that §63.7(b)(1) only applies as specified in §63.6645.
§63.7(b)(2)	Notification of rescheduling	Yes	Except that §63.7(b)(2) only applies as specified in §63.6645.
§63.7(c)	Quality assurance/test plan	Yes	Except that §63.7(c) only applies as specified in §63.6645.
§63.7(d)	Testing facilities	Yes.	
§63.7(e)(1)	Conditions for conducting performance tests	No.	Subpart ZZZZ specifies conditions for conducting performance tests at §63.6620.
§63.7(e)(2)	Conduct of performance tests and reduction of data	Yes	Subpart ZZZZ specifies test methods at §63.6620.
§63.7(e)(3)	Test run duration	Yes.	
§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	Yes	For CO standard if using

	alternative to RATA		RATA alternative.
§63.10(b)(2)(xiv)	Records of supporting documentation	Yes.	
§63.10(b)(3)	Records of applicability determination	Yes.	
§63.10(c)	Additional records for sources using CEMS	Yes	Except that §63.10(c)(2)–(4) and (9) are reserved.
§63.10(d)(1)	General reporting requirements	Yes.	
§63.10(d)(2)	Report of performance test results	Yes.	
§63.10(d)(3)	Reporting opacity or VE observations	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.10(d)(4)	Progress reports	Yes.	
§63.10(d)(5)	Startup, shutdown, and malfunction reports	No.	
§63.10(e)(1) and (2)(i)	Additional CMS Reports	Yes.	
§63.10(e)(2)(ii)	COMS-related report	No	Subpart ZZZZ does not require COMS.
§63.10(e)(3)	Excess emission and parameter exceedances reports	Yes.	Except that §63.10(e)(3)(i) (C) is reserved.
§63.10(e)(4)	Reporting COMS data	No	Subpart ZZZZ does not require COMS.
§63.10(f)	Waiver for recordkeeping/reporting	Yes.	
§63.11	Flares	No.	
§63.12	State authority and delegations	Yes.	
§63.13	Addresses	Yes.	
§63.14	Incorporation by reference	Yes.	

§63.15	Availability of information	Yes.	

[75 FR 9688, Mar. 3, 2010]

Part 70 Operating Permit Renewal
OFFICE OF AIR QUALITY

General Motors LLC
105 GM Drive
Bedford, IN 47421

Attachment C

Title 40: Protection of Environment

Part 63 - National Emission Standards for Hazardous Air Pollutants

Subpart ZZZZZZ—Area Source Standards for Aluminum, Copper, and Other Nonferrous Foundries

T093-26058-00007

Subpart ZZZZZZ—National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Aluminum, Copper, and Other Nonferrous Foundries

Source: 74 FR 30393, June 25, 2009, unless otherwise noted.

Applicability and Compliance Dates

§ 63.11544 Am I subject to this subpart?

(a) You are subject to this subpart if you own or operate an aluminum foundry, copper foundry, or other nonferrous foundry as defined in §63.11556, “What definitions apply to this subpart?” that is an area source of hazardous air pollutant (HAP) emissions as defined in §63.2 and meets the criteria specified in paragraphs (a)(1) through (4) of this section. Once you are subject to this subpart, you must remain subject to this subpart even if you subsequently do not meet the criteria in paragraphs (a)(1) through (4) of this section.

(1) Your aluminum foundry uses material containing aluminum foundry HAP, as defined in §63.11556, “What definitions apply to this subpart?”; or

(2) Your copper foundry uses material containing copper foundry HAP, as defined in §63.11556, “What definitions apply to this subpart?”; or

(3) Your other nonferrous foundry uses material containing other nonferrous foundry HAP, as defined in §63.11556, “What definitions apply to this subpart?”.

(4) Your aluminum foundry, copper foundry, or other nonferrous foundry has an annual metal melt production (for existing affected sources) or an annual metal melt capacity (for new affected sources) of at least 600 tons per year (tpy) of aluminum, copper, and other nonferrous metals, including all associated alloys. You must determine the annual metal melt production and capacity for the time period as described in paragraphs (a)(4)(i) through (iv) of this section. The quantity of ferrous metals melted in iron or steel melting operations and the quantity of nonferrous metal melted in non-foundry melting operations are not included in determining the annual metal melt production for existing affected sources or the annual metal melt capacity for new affected sources.

(i) If you own or operate a melting operation at an aluminum, copper or other nonferrous foundry as of February 9, 2009, you must determine if you are subject to this rule based on your facility's annual metal melt production for calendar year 2010.

(ii) If you construct or reconstruct a melting operation at an aluminum, copper or other nonferrous foundry after February 9, 2009, you must determine if you are subject to this rule based on your facility's annual metal melt capacity at startup.

(iii) If your foundry with an existing melting operation increases production after calendar year 2010 such that the annual metal melt production equals or exceeds 600 tpy, you must submit a written notification of applicability to the Administrator within 30 days after the end of the calendar year and comply within 2 years after the date of the notification.

(iv) If your foundry with a new melting operation increases capacity after startup such that the annual metal melt capacity equals or exceeds 600 tpy, you must submit a written notification of applicability to the Administrator within 30 days after the capacity increase year and comply at the time of the capacity increase.

(b) This subpart applies to each new or existing affected source located at an aluminum, copper or other nonferrous foundry that is an area source as defined by §63.2. The affected source is the collection of all melting operations located at an aluminum, copper, or other nonferrous foundry.

(c) An affected source is an existing source if you commenced construction or reconstruction of the affected source on or before February 9, 2009.

(d) An affected source is a new source if you commenced construction or reconstruction of the affected source after February 9, 2009.

(e) This subpart does not apply to research or laboratory facilities, as defined in section 112(c)(7) of the Clean Air Act.

(f) You are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71, provided you are not otherwise 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.

[74 FR 30393, June 25, 2009, as amended at 74 FR 46495, Sept. 10, 2009]

§ 63.11545 What are my compliance dates?

(a) If you own or operate an existing affected source, you must achieve compliance with the applicable provisions of this subpart no later than June 27, 2011.

(b) If you start up a new affected source on or before June 25, 2009, you must achieve compliance with the provisions of this subpart no later than June 25, 2009.

(c) If you start up a new affected source after June 25, 2009, you must achieve compliance with the provisions of this subpart upon startup of your affected source.

Standards and Compliance Requirements

§ 63.11550 What are my standards and management practices?

(a) If you own or operate new or existing affected sources at an aluminum foundry, copper foundry, or other nonferrous foundry that is subject to this subpart, you must comply with the requirements in paragraphs (a)(1) through (3) of this section.

(1) Cover or enclose each melting furnace that is equipped with a cover or enclosure during the melting operation to the extent practicable (e.g., except when access is needed; including, but not limited to charging, alloy addition, and tapping).

(2) Purchase only metal scrap that has been depleted (to the extent practicable) of aluminum foundry HAP, copper foundry HAP, or other nonferrous foundry HAP (as applicable) in the materials charged to the melting furnace, except metal scrap that is purchased specifically for its HAP metal content for use in alloying or to meet specifications for the casting. This requirement does not apply to material that is not scrap (e.g., ingots, alloys, sows) or to materials that are not purchased (e.g., internal scrap, customer returns).

(3) Prepare and operate pursuant to a written management practices plan. The management practices plan must include the required management practices in paragraphs (a)(1) and (2) of this section and may include any other management practices that are implemented at the facility to minimize emissions from melting furnaces. You must inform your appropriate employees of the management practices that they must follow. You may use your standard operating procedures as the management practices plan provided the

standard operating procedures include the required management practices in paragraphs (a)(1) and (2) of this section.

(b) If you own or operate a new or existing affected source that is located at a large foundry as defined in §63.11556, you must comply with the additional requirements in paragraphs (b)(1) and (2) of this section.

(1) For existing affected sources located at a large foundry, you must achieve a particulate matter (PM) control efficiency of at least 95.0 percent or emit no more than an outlet PM concentration limit of 0.034 grams per dry standard cubic meter (g/dscm) (0.015 grains per dry standard cubic feet (gr/dscf)).

(2) For new affected sources located at a large foundry, you must achieve a PM control efficiency of at least 99.0 percent or emit no more than an outlet PM concentration limit of at most 0.023 g/dscm (0.010 gr/dscf).

(c) If you own or operate an affected source at a small foundry that subsequently becomes a large foundry after the applicable compliance date, you must meet the requirements in paragraphs (c)(1) through (3) of this section.

(1) You must notify the Administrator within 30 days after the capacity increase or the production increase, whichever is appropriate;

(2) You must modify any applicable permit limits within 30 days after the capacity increase or the production increase to reflect the current production or capacity, if not done so prior to the increase;

(3) You must comply with the PM control requirements in paragraph (b) of this section no later than 2 years from the date of issuance of the permit for the capacity increase or production increase, or in the case of no permit issuance, the date of the increase in capacity or production, whichever occurs first.

(d) These standards apply at all times.

§ 63.11551 What are my initial compliance requirements?

(a) Except as specified in paragraph (b) of this section, you must conduct a performance test for existing and new sources at a large copper or other nonferrous foundry that is subject to §63.11550(b). You must conduct the test within 180 days of your compliance date and report the results in your Notification of Compliance Status according to §63.9(h).

(b) If you own or operate an existing affected source at a large copper or other nonferrous foundry that is subject to §63.11550(b), you are not required to conduct a performance test if a prior performance test was conducted within the past 5 years of the compliance date using the same methods specified in paragraph (c) of this section and you meet either of the following two conditions:

(1) No process changes have been made since the test; or

(2) You demonstrate to the satisfaction of the permitting authority that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process changes.

(c) You must conduct each performance test according to the requirements in §63.7 and the requirements in paragraphs (c)(1) and (2) of this section.

(1) You must determine the concentration of PM (for the concentration standard) or the mass rate of PM in pounds per hour at the inlet and outlet of the control device (for the percent reduction standard) according to the following test methods:

(i) Method 1 or 1A (40 CFR part 60, appendix A–1) to select sampling port locations and the number of traverse points in each stack or duct. If you are complying with the concentration provision in §63.11550(b),

sampling sites must be located at the outlet of the control device and prior to any releases to the atmosphere. If you are complying with the percent reduction provision in §63.11550(b), sampling sites must be located at the inlet and outlet of the control device and prior to any releases to the atmosphere.

(ii) Method 2, 2A, 2C, 2D, 2F (40 CFR part 60, appendix A–1), or Method 2G (40 CFR part 60, appendix A–2) to determine the volumetric flow rate of the stack gas.

(iii) Method 3, 3A, or 3B (40 CFR part 60, appendix A–2) to determine the dry molecular weight of the stack gas. You may use ANSI/ASME PTC 19.10–1981, “Flue and Exhaust Gas Analyses” (incorporated by reference—see §63.14) as an alternative to EPA Method 3B.

(iv) Method 4 (40 CFR part 60, appendix A–3) to determine the moisture content of the stack gas.

(v) Method 5 or 5D (40 CFR part 60, appendix A–3) or Method 17 (40 CFR part 60, appendix A–6) to determine the concentration of PM or mass rate of PM (front half filterable catch only). If you choose to comply with the percent reduction PM standard, you must determine the mass rate of PM at the inlet and outlet in pounds per hour and calculate the percent reduction in PM.

(2) Three valid test runs are needed to comprise a performance test. Each run must cover at least one production cycle (charging, melting, and tapping).

(3) For a source with a single control device exhausted through multiple stacks, you must ensure that three runs are performed by a representative sampling of the stacks satisfactory to the Administrator or his or her delegated representative. You must provide data or an adequate explanation why the stack(s) chosen for testing are representative.

§ 63.11552 What are my monitoring requirements?

(a) You must record the information specified in §63.11553(c)(2) to document conformance with the management practices plan required in §63.11550(a).

(b) Except as specified in paragraph (b)(3) of this section, if you own or operate an existing affected source at a large foundry, you must conduct visible emissions monitoring according to the requirements in paragraphs (b)(1) and (2) of this section.

(1) You must conduct visual monitoring of the fabric filter discharge point(s) (outlets) for any VE according to the schedule specified in paragraphs (b)(1)(i) and (ii) of this section.

(i) You must perform a visual determination of emissions once per day, on each day the process is in operation, during melting operations.

(ii) If no VE are detected in consecutive daily visual monitoring performed in accordance with paragraph (b)(1)(i) of this section for 30 consecutive days or more of operation of the process, you may decrease the frequency of visual monitoring to once per calendar week of time the process is in operation, during melting operations. If VE are detected during these inspections, you must resume daily visual monitoring of that operation during each day that the process is in operation, in accordance with paragraph (b)(1)(i) of this section until you satisfy the criteria of this section to resume conducting weekly visual monitoring.

(2) If the visual monitoring reveals the presence of any VE, you must initiate procedures to determine the cause of the emissions within 1 hour of the initial observation and alleviate the cause of the emissions within 3 hours of initial observation by taking whatever corrective action(s) are necessary. You may take more than 3 hours to alleviate a specific condition that causes VE if you identify in the monitoring plan this specific condition as one that could lead to VE in advance, you adequately explain why it is not feasible to alleviate this condition within 3 hours of the time the VE occurs, and you demonstrate that the requested time will ensure alleviation of this condition as expeditiously as practicable.

(3) As an alternative to the monitoring requirements for an existing affected source in paragraphs (b)(1) and (2) of this section, you may install, operate, and maintain a bag leak detection system for each fabric filter according to the requirements in paragraph (c) of this section.

(c) If you own or operate a new affected source located at a large foundry subject to the PM requirements in §63.11550(b)(2) that is equipped with a fabric filter, you must install, operate, and maintain a bag leak detection system for each fabric filter according to paragraphs (c)(1) through (4) of this section.

(1) Each bag leak detection system must meet the specifications and requirements in paragraphs (c)(1)(i) through (viii) of this section.

(i) The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 1 milligram per actual cubic meter (0.00044 grains per actual cubic foot) or less.

(ii) The bag leak detection system sensor must provide output of relative PM loadings. You must continuously record the output from the bag leak detection system using electronic or other means (e.g., using a strip chart recorder or a data logger).

(iii) The bag leak detection system must be equipped with an alarm system that will sound when the system detects an increase in relative particulate loading over the alarm set point established according to paragraph (c)(1)(iv) of this section, and the alarm must be located such that it can be heard by the appropriate plant personnel.

(iv) In the initial adjustment of the bag leak detection system, you must establish, at a minimum, the baseline output by adjusting the sensitivity (range) and the averaging period of the device, the alarm set points, and the alarm delay time.

(v) Following initial adjustment, you must not adjust the averaging period, alarm set point, or alarm delay time without approval from the Administrator or delegated authority, except as provided in paragraph (c)(1)(vi) of this section.

(vi) Once per quarter, you may adjust the sensitivity of the bag leak detection system to account for seasonal effects, including temperature and humidity, according to the procedures identified in the site-specific monitoring plan required by paragraph (c)(2) of this section.

(vii) You must install the bag leak detection sensor downstream of the fabric filter.

(viii) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.

(2) You must prepare a site-specific monitoring plan for each bag leak detection system. You must operate and maintain each bag leak detection system according to the plan at all times. Each monitoring plan must describe the items in paragraphs (c)(2)(i) through (vi) of this section.

(i) Installation of the bag leak detection system;

(ii) Initial and periodic adjustment of the bag leak detection system, including how the alarm set-point and alarm delay time will be established;

(iii) Operation of the bag leak detection system, including quality assurance procedures;

(iv) How the bag leak detection system will be maintained, including a routine maintenance schedule and spare parts inventory list;

(v) How the bag leak detection system output will be recorded and stored; and

(vi) Corrective action procedures as specified in paragraph (c)(3) of this section.

(3) Except as provided in paragraph (c)(4) of this section, you must initiate procedures to determine the cause of every alarm from a bag leak detection system within 1 hour of the alarm and alleviate the cause of the alarm within 3 hours of the alarm by taking whatever corrective action(s) are necessary. Corrective actions may include, but are not limited to, the following:

(i) Inspecting the fabric filter for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in PM emissions;

(ii) Sealing off defective bags or filter media;

(iii) Replacing defective bags or filter media, or otherwise repairing the control device;

(iv) Sealing off a defective fabric filter compartment;

(v) Cleaning the bag leak detection system probe, or otherwise repairing the bag leak detection system; or

(4) You may take more than 3 hours to alleviate a specific condition that causes an alarm if you identify in the monitoring plan this specific condition as one that could lead to an alarm, adequately explain why it is not feasible to alleviate this condition within 3 hours of the time the alarm occurs, and demonstrate that the requested time will ensure alleviation of this condition as expeditiously as practicable.

(d) If you use a control device other than a fabric filter for new or existing affected sources subject to §63.11550(b), you must submit a request to use an alternative monitoring procedure as required in §63.8(f)(4).

§ 63.11553 What are my notification, reporting, and recordkeeping requirements?

(a) You must submit the Initial Notification required by §63.9(b)(2) no later than 120 calendar days after June 25, 2009 or within 120 days after the source becomes subject to the standard. The Initial Notification must include the information specified in paragraphs (a)(1) through (3) of this section and may be combined with the Notification of Compliance Status required in paragraph (b) of this section.

(1) The name and address of the owner or operator;

(2) The address (i.e., physical location) of the affected source; and

(3) An identification of the relevant standard, or other requirement, that is the basis of the notification and source's compliance date.

(b) You must submit the Notification of Compliance Status required by §63.9(h) no later than 120 days after the applicable compliance date specified in §63.11545 unless you must conduct a performance test. If you must conduct a performance test, you must submit the Notification of Compliance Status within 60 days of completing the performance test. Your Notification of Compliance Status must indicate if you are a small or large foundry as defined in §63.11556, the production amounts as the basis for the determination, and if you are a large foundry, whether you elect to comply with the control efficiency requirement or PM concentration limit in §63.11550(b). In addition to the information required in §63.9(h)(2) and §63.11551, your notification must include the following certification(s) of compliance, as applicable, and signed by a responsible official:

(1) “This facility will operate in a manner that minimizes HAP emissions from the melting operations to the extent possible. This includes at a minimum that the owners and/or operators of the affected source will

cover or enclose each melting furnace that is equipped with a cover or enclosure during melting operations to the extent practicable as required in 63.11550(a)(1)."

(2) "This facility agrees to purchase only metal scrap that has been depleted (to the extent practicable) of aluminum foundry HAP, copper foundry HAP, or other nonferrous foundries HAP (as applicable) in the materials charged to the melting furnace, except for metal scrap that is purchased specifically for its HAP metal content for use in alloying or to meet specifications for the casting as required by 63.11550(a)(2)."

(3) "This facility has prepared and will operate by a written management practices plan according to §63.11550(a)(3)."

(4) If the owner or operator of an existing affected source at a large foundry is certifying compliance based on the results of a previous performance test: "This facility complies with §63.11550(b) based on a previous performance test in accordance with §63.11551(b)."

(5) This certification of compliance is required by the owner or operator that installs bag leak detection systems: "This facility has installed a bag leak detection system in accordance with §63.11552(b)(3) or (c), has prepared a bag leak detection system monitoring plan in accordance with §63.11552(c), and will operate each bag leak detection system according to the plan."

(c) You must keep the records specified in paragraphs (c)(1) through (5) of this section.

(1) As required in §63.10(b)(2)(xiv), you must keep a copy of each notification that you submitted to comply with this subpart and all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted.

(2) You must keep records to document conformance with the management practices plan required by §63.11550 as specified in paragraphs (c)(2)(i) and (ii) of this section.

(i) For melting furnaces equipped with a cover or enclosure, records must identify each melting furnace equipped with a cover or enclosure and document that the procedures in the management practices plan were followed during the monthly inspections. These records may be in the form of a checklist.

(ii) Records documenting that you purchased only metal scrap that has been depleted of HAP metals (to the extent practicable) charged to the melting furnace. If you purchase scrap metal specifically for the HAP metal content for use in alloying or to meet specifications for the casting, you must keep records to document that the HAP metal is included in the material specifications for the cast metal product.

(3) You must keep the records of all performance tests, inspections and monitoring data required by §§63.11551 and 63.11552, and the information identified in paragraphs (c)(3)(i) through (vi) of this section for each required inspection or monitoring.

(i) The date, place, and time of the monitoring event;

(ii) Person conducting the monitoring;

(iii) Technique or method used;

(iv) Operating conditions during the activity;

(v) Results, including the date, time, and duration of the period from the time the monitoring indicated a problem (e.g., VE) to the time that monitoring indicated proper operation; and

(vi) Maintenance or corrective action taken (if applicable).

(4) If you own or operate a new or existing affected source at a small foundry that is not subject to §63.11550(b), you must maintain records to document that your facility melts less than 6,000 tpy total of copper, other nonferrous metal, and all associated alloys (excluding aluminum) in each calendar year.

(5) If you use a bag leak detection system, you must keep the records specified in paragraphs (c)(5)(i) through (iii) of this section.

(i) Records of the bag leak detection system output.

(ii) Records of bag leak detection system adjustments, including the date and time of the adjustment, the initial bag leak detection system settings, and the final bag leak detection system settings.

(iii) The date and time of all bag leak detection system alarms, and for each valid alarm, the time you initiated corrective action, the corrective action taken, and the date on which corrective action was completed.

(d) Your records must be in a form suitable and readily available for expeditious review, according to §63.10(b)(1). As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each recorded action. For records of annual metal melt production, you must keep the records for 5 years from the end of the calendar year. You must keep each record onsite for at least 2 years after the date of each recorded action according to §63.10(b)(1). You may keep the records offsite for the remaining 3 years.

(e) If a deviation occurs during a semiannual reporting period, you must submit a compliance report to your permitting authority according to the requirements in paragraphs (e)(1) and (2) of this section.

(1) The first reporting period covers the period beginning on the compliance date specified in §63.11545 and ending on June 30 or December 31, whichever date comes first after your compliance date. Each subsequent reporting period covers the semiannual period from January 1 through June 30 or from July 1 through December 31. Your compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date comes first after the end of the semiannual reporting period.

(2) A compliance report must include the information in paragraphs (e)(2)(i) through (iv) of this section.

(i) Company name and address.

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

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

(iv) Identification of the affected source, the pollutant being monitored, applicable requirement, description of deviation, and corrective action taken.

[74 FR 30393, June 25, 2009, as amended at 74 FR 46495, Sept. 10, 2009]

Other Requirements and Information

§ 63.11555 What General Provisions apply to this subpart?

Table 1 to this subpart shows which parts of the General Provisions in §§63.1 through 63.16 apply to you.

§ 63.11556 What definitions apply to this subpart?

Terms used in this subpart are defined in the Clean Air Act, in §63.2, and in this section as follows:

Aluminum foundry means a facility that melts aluminum and pours molten aluminum into molds to manufacture aluminum castings (except die casting) that are complex shapes. For purposes of this subpart, this definition does not include primary or secondary metal producers that cast molten aluminum to produce simple shapes such as sows, ingots, bars, rods, or billets.

Aluminum foundry HAP means any compound of the following metals: beryllium, cadmium, lead, manganese, or nickel, or any of these metals in the elemental form.

Annual copper and other nonferrous foundry metal melt capacity means, for new affected sources, the lower of the copper and other nonferrous metal melting operation capacity, assuming 8,760 operating hours per year or, if applicable, the maximum permitted copper and other nonferrous metal melting operation production rate for the melting operation calculated on an annual basis. Unless otherwise specified in the permit, permitted copper and other nonferrous metal melting operation rates that are not specified on an annual basis must be annualized assuming 24 hours per day, 365 days per year of operation. If the permit limits the operating hours of the melting operation(s) or foundry, then the permitted operating hours are used to annualize the maximum permitted copper and other nonferrous metal melt production rate. The annual copper and other nonferrous metal melt capacity does not include the melt capacity for ferrous metal melted in iron or steel foundry melting operations that are co-located with copper or other nonferrous melting operations or the nonferrous metal melted in non-foundry melting operations.

Annual copper and other nonferrous foundry metal melt production means, for existing affected sources, the quantity of copper and other nonferrous metal melted in melting operations at the foundry in a given calendar year. For the purposes of this subpart, metal melt production is determined on the basis of the quantity of metal charged to the melting operations. The annual copper and nonferrous metal melt production does not include the melt production of ferrous metal melted in iron or steel foundry melting operations that are co-located with copper and other nonferrous melting operations or the nonferrous metal melted in non-foundry melting operations.

Annual metal melt capacity, for new affected sources, means the lower of the aluminum, copper, and other nonferrous metal melting operation capacity, assuming 8,760 operating hours per year or, if applicable, the maximum permitted aluminum, copper, and other nonferrous metal melting operation production rate for the melting operation calculated on an annual basis. Unless otherwise specified in the permit, permitted aluminum, copper, and other nonferrous metal melting operation rates that are not specified on an annual basis must be annualized assuming 24 hours per day, 365 days per year of operation. If the permit limits the operating hours of the melting operation(s) or foundry, then the permitted operating hours are used to annualize the maximum permitted aluminum, copper, and other nonferrous metal melt production rate. The annual metal melt capacity does not include the melt capacity for ferrous metal melted in iron or steel foundry melting operations that are co-located with aluminum, copper, or other nonferrous melting operations or the nonferrous metal melted in non-foundry melting operations.

Annual metal melt production means, for existing affected sources, the quantity of aluminum, copper, and other nonferrous metal melted in melting operations at the foundry in a given calendar year. For the purposes of this subpart, annual metal melt production is determined on the basis of the quantity of metal charged to the melting operations. The annual metal melt production does not include the melt production of ferrous metal melted in iron or steel foundry melting operations that are co-located with aluminum, copper, or other nonferrous melting operations or the nonferrous metal melted in non-foundry melting operations.

Bag leak detection system means a system that is capable of continuously monitoring relative PM (*i.e.,* dust) loadings in the exhaust of a baghouse to detect bag leaks and other upset conditions. A bag leak detection system includes, but is not limited to, an instrument that operates on triboelectric, light scattering, light transmittance, or other effect to continuously monitor relative PM loadings.

Copper foundry means a foundry that melts copper or copper-based alloys and pours molten copper or copper-based alloys into molds to manufacture copper or copper-based alloy castings (excluding die casting) that are complex shapes. For purposes of this subpart, this definition does not include primary or secondary metal producers that cast molten copper to produce simple shapes such as sows, ingots, billets, bars, anode copper, rods, or copper cake.

Copper foundry HAP means any compound of any of the following metals: lead, manganese, or nickel, or any of these metals in the elemental form.

Deviation means any instance where 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 emissions limitation or work practice standard;

(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 emissions limitation in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.

Die casting means operations classified under the North American Industry Classification System codes 331521 (Aluminum Die-Casting Foundries) and 331522 (Nonferrous (except Aluminum) Die-Casting Foundries) and comprises establishments primarily engaged in introducing molten aluminum, copper, and other nonferrous metal, under high pressure, into molds or dies to make die-castings.

Large foundry means, for an existing affected source, a copper or other nonferrous foundry with an annual metal melt production of copper, other nonferrous metals, and all associated alloys (excluding aluminum) of 6,000 tons or greater. For a new affected source, *large foundry* means a copper or other nonferrous foundry with an annual metal melt capacity of copper, other nonferrous metals, and all associated alloys (excluding aluminum) of 6,000 tons or greater.

Material containing aluminum foundry HAP means a material containing one or more aluminum foundry HAP. Any material that contains beryllium, cadmium, lead, or nickel in amounts greater than or equal to 0.1 percent by weight (as the metal), or contains manganese in amounts greater than or equal to 1.0 percent by weight (as the metal), as shown in formulation data provided by the manufacturer or supplier, such as the Material Safety Data Sheet for the material, is considered to be a material containing aluminum foundry HAP.

Material containing copper foundry HAP means a material containing one or more copper foundry HAP. Any material that contains lead or nickel in amounts greater than or equal to 0.1 percent by weight (as the metal), or contains manganese in amounts greater than or equal to 1.0 percent by weight (as the metal), as shown in formulation data provided by the manufacturer or supplier, such as the Material Safety Data Sheet for the material, is considered to be a material containing copper foundry HAP.

Material containing other nonferrous foundry HAP means a material containing one or more other nonferrous foundry HAP. Any material that contains chromium, lead, or nickel in amounts greater than or equal to 0.1 percent by weight (as the metal), as shown in formulation data provided by the manufacturer or supplier, such as the Material Safety Data Sheet for the material, is considered to be a material containing other nonferrous foundry HAP.

Melting operations (the affected source) means the collection of furnaces (*e.g.,* induction, reverberatory, crucible, tower, dry hearth) used to melt metal ingot, alloyed ingot and/or metal scrap to produce molten metal that is poured into molds to make castings. Melting operations dedicated to melting ferrous metal at an iron and steel foundry are not included in this definition and are not part of the affected source.

Other nonferrous foundry means a facility that melts nonferrous metals other than aluminum, copper, or copper-based alloys and pours the nonferrous metals into molds to manufacture nonferrous metal castings (excluding die casting) that are complex shapes. For purposes of this subpart, this definition does not include primary or secondary metal producers that cast molten nonferrous metals to produce simple shapes such as sows, ingots, bars, rods, or billets.

Other nonferrous foundry HAP means any compound of the following metals: chromium, lead, and nickel, or any of these metals in the elemental form.

Small foundry means, for an existing affected source, a copper or other nonferrous foundry with an annual metal melt production of copper, other nonferrous metals, and all associated alloys (excluding aluminum) of less than 6,000 tons. For a new affected source, *small foundry* means a copper or other nonferrous foundry with an annual metal melt capacity of copper, other nonferrous metals, and all associated alloys (excluding aluminum) of less than 6,000 tons.

§ 63.11557 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by the U.S. EPA or a delegated authority, such as 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 has the authority to implement and enforce this subpart. You should contact your U.S. EPA Regional Office to find out if 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 listed in paragraphs (c)(1) through (4) of this section.

(1) Approval of alternatives to the applicability requirements in §63.11544, the compliance date requirements in §63.11545, and the applicable standards in §63.11550.

(2) Approval of an alternative nonopacity emissions standard under §63.6(g).

(3) Approval of a major change to a test method under §63.7(e)(2)(ii) and (f). A “major change to test method” is defined in §63.90(a).

(4) Approval of a major change to monitoring under §63.8(f). A “major change to monitoring” is defined in §63.90(a).

(5) Approval of a waiver of recordkeeping or reporting requirements under §63.10(f), or another major change to recordkeeping/reporting. A “major change to recordkeeping/reporting” is defined in §63.90(a).

§ 63.11558 [Reserved]

Table 1 to Subpart ZZZZZZ of Part 63—Applicability of General Provisions to Aluminum, Copper, and Other Nonferrous Foundries Area Sources

As required in §63.11555, “What General Provisions apply to this subpart?,” you must comply with each requirement in the following table that applies to you.

Citation	Subject	Applies to subpart ZZZZZZ?	Explanation
§63.1(a)(1), (a)(2), (a)(3), (a)(4), (a)(6), (a)(10)–(a)(12), (b)(1), (b)(3), (c)(1), (c)(2),	Applicability	Yes	§63.11544(f) exempts affected sources from the obligation to obtain a title V operating

(c)(5), (e)			permit.
§63.1(a)(5), (a)(7)–(a)(9), (b)(2), (c)(3), (c)(4), (d)	Reserved	No	
§63.2	Definitions	Yes	
§63.3	Units and Abbreviations	Yes	
§63.4	Prohibited Activities and Circumvention	Yes	
§63.5	Preconstruction Review and Notification Requirements	Yes	
§63.6(a), (b)(1)–(b)(5), (b)(7), (c)(1), (c)(2), (c)(5), (e)(1), (e)(3)(i), (e)(3)(iii)–(e)(3)(ix), (f)(2), (f)(3), (g), (i), (j)	Compliance with Standards and Maintenance Requirements	Yes	
§63.6(f)(1)	Compliance with Nonopacity Emission Standards	No	Subpart ZZZZZZ requires continuous compliance with all requirements in this subpart.
§63.6(h)(1), (h)(2), (h)(5)–(h)(9)	Compliance with Opacity and Visible Emission Limits	No	Subpart ZZZZZZ does not contain opacity or visible emission limits.
§63.6(b)(6), (c)(3), (c)(4), (d), (e)(2), (e)(3)(ii), (h)(3), (h)(5)(iv)	Reserved	No	
§63.7	Applicability and Performance Test Dates	Yes	
§63.8(a)(1), (b)(1), (f)(1)–(5), (g)	Monitoring Requirements	Yes	
§63.8(a)(2), (a)(4), (b)(2)–(3), (c), (d), (e), (f)(6), (g)	Continuous Monitoring Systems	No	Subpart ZZZZZZ does not require a flare or CPMS, COMS or

			CEMS.
§63.8(a)(3)	[Reserved]	No	
§63.9(a), (b)(1), (b)(2)(i)–(iii), (b)(5), (c), (d), (e), (h)(1)–(h)(3), (h)(5), (h)(6), (j)	Notification Requirements	Yes	Subpart ZZZZZZ requires submission of Notification of Compliance Status within 120 days of compliance date unless a performance test is required.
§63.9(b)(2)(iv)–(v), (b)(4), (f), (g), (i)	No		
§63.9(b)(3), (h)(4)	Reserved	No	
§63.10(a), (b)(1), (b)(2)(i)–(v), (vii), (vii)(C), (viii), (ix), (b)(3), (d)(1)–(2), (d)(4), (d)(5), (f)	Recordkeeping and Reporting Requirements	Yes	
§63.10(b)(2)(vi), (b)(2)(vii)(A)–(B), (c), (d)(3), (e)	No	Subpart ZZZZZZ does not require a CPMS, COMS, CEMS, or opacity or visible emissions limit.	
§63.10(c)(2)–(c)(4), (c)(9)	Reserved	No	
§63.11	Control Device Requirements	No	
§63.12	State Authority and Delegations	Yes	
§§63.13–63.16	Addresses, Incorporations by Reference, Availability of Information, Performance Track Provisions	Yes	

Part 70 Operating Permit Renewal
OFFICE OF AIR QUALITY

General Motors LLC
105 GM Drive
Bedford, IN 47421

Attachment D

Title 40: Protection of Environment

Part 60 – New Source Performance Standards

Subpart UUU—Calciners and Dryers in Mineral Processing Industries

T093-26058-00007

Title 40: Protection of Environment

PART 60—STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES

Browse Previous | Browse Next

Subpart UUU—Standards of Performance for Calciners and Dryers in Mineral Industries

Source: 57 FR 44503, Sept. 28, 1992, unless otherwise noted.

§ 60.730 Applicability and designation of affected facility.

(a) The affected facility to which the provisions of this subpart apply is each calciner and dryer at a mineral processing plant. Feed and product conveyors are not considered part of the affected facility. For the brick and related clay products industry, only the calcining and drying of raw materials prior to firing of the brick are covered.

(b) An affected facility that is subject to the provisions of subpart LL, Metallic Mineral Processing Plants, is not subject to the provisions of this subpart. Also, the following processes and process units used at mineral processing plants are not subject to the provisions of this subpart: vertical shaft kilns in the magnesium compounds industry; the chlorination-oxidation process in the titanium dioxide industry; coating kilns, mixers, and aerators in the roofing granules industry; and tunnel kilns, tunnel dryers, apron dryers, and grinding equipment that also dries the process material used in any of the 17 mineral industries (as defined in §60.731, “Mineral processing plant”).

(c) The owner or operator of any facility under paragraph (a) of this section that commences construction, modification, or reconstruction after April 23, 1986, is subject to the requirements of this subpart.

§ 60.731 Definitions.

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

Calciner means the equipment used to remove combined (chemically bound) water and/or gases from mineral material through direct or indirect heating. This definition includes expansion furnaces and multiple hearth furnaces.

Control device means the air pollution control equipment used to reduce particulate matter emissions released to the atmosphere from one or more affected facilities.

Dryer means the equipment used to remove uncombined (free) water from mineral material through direct or indirect heating.

Installed in series means a calciner and dryer installed such that the exhaust gases from one flow through the other and then the combined exhaust gases are discharged to the atmosphere.

Mineral processing plant means any facility that processes or produces any of the following minerals, their concentrates or any mixture of which the majority (>50 percent) is any of the following minerals or a combination of these minerals: alumina, ball clay, bentonite, diatomite, feldspar, fire clay, fuller's earth, gypsum, industrial sand, kaolin, lightweight aggregate, magnesium compounds, perlite, roofing granules, talc, titanium dioxide, and vermiculite.

§ 60.732 Standards for particulate matter.

Each owner or operator of any affected facility that is subject to the requirements of this subpart shall comply with the emission limitations set forth in this section on and after the date on which the initial performance test required by §60.8 is completed, but not later than 180 days after the initial startup, whichever date comes first. No emissions shall be discharged into the atmosphere from any affected facility that:

(a) Contains particulate matter in excess of 0.092 gram per dry standard cubic meter (g/dscm) [0.040 grain per dry standard cubic foot (gr/dscf)] for calciners and for calciners and dryers installed in series and in excess of 0.057 g/dscm (0.025 gr/dscf) for dryers; and

(b) Exhibits greater than 10 percent opacity, unless the emissions are discharged from an affected facility using a wet scrubbing control device.

[57 FR 44503, Sept. 28, 1992, as amended at 65 FR 61778, Oct. 17, 2000]

§ 60.733 Reconstruction.

The cost of replacement of equipment subject to high temperatures and abrasion on processing equipment shall not be considered in calculating either the “fixed capital cost of the new components” or the “fixed capital cost that would be required to construct a comparable new facility” under §60.15. Calciner and dryer equipment subject to high temperatures and abrasion are: end seals, flights, and refractory lining.

§ 60.734 Monitoring of emissions and operations.

(a) With the exception of the process units described in paragraphs (b), (c), and (d) of this section, the owner or operator of an affected facility subject to the provisions of this subpart who uses a dry control device to comply with the mass emission standard shall install, calibrate, maintain, and operate a continuous monitoring system to measure and record the opacity of emissions discharged into the atmosphere from the control device.

(b) In lieu of a continuous opacity monitoring system, the owner or operator of a ball clay vibrating grate dryer, a bentonite rotary dryer, a diatomite flash dryer, a diatomite rotary calciner, a feldspar rotary dryer, a fire clay rotary dryer, an industrial sand fluid bed dryer, a kaolin rotary calciner, a perlite rotary dryer, a roofing granules fluid bed dryer, a roofing granules rotary dryer, a talc rotary calciner, a titanium dioxide spray dryer, a titanium dioxide fluid bed dryer, a vermiculite fluid bed dryer, or a vermiculite rotary dryer who uses a dry control device may have a certified visible emissions observer measure and record three 6-minute averages of the opacity of visible emissions to the atmosphere each day of operation in accordance with Method 9 of appendix A of part 60.

(c) The owner or operator of a ball clay rotary dryer, a diatomite rotary dryer, a feldspar fluid bed dryer, a fuller's earth rotary dryer, a gypsum rotary dryer, a gypsum flash calciner, gypsum kettle calciner, an industrial sand rotary dryer, a kaolin rotary dryer, a kaolin multiple hearth furnace, a perlite expansion furnace, a talc flash dryer, a talc rotary dryer, a titanium dioxide direct or indirect rotary dryer or a vermiculite expansion furnace who uses a dry control device is exempt from the monitoring requirements of this section.

(d) The owner or operator of an affected facility subject to the provisions of this subpart who uses a wet scrubber to comply with the mass emission standard for any affected facility shall install, calibrate, maintain, and operate monitoring devices that continuously measure and record the pressure loss of the gas stream through the scrubber and the scrubbing liquid flow rate to the scrubber. The pressure loss monitoring device must be certified by the manufacturer to be accurate within 5 percent of water column gauge pressure at the level of operation. The liquid flow rate monitoring device must be certified by the manufacturer to be accurate within 5 percent of design scrubbing liquid flow rate.

§ 60.735 Recordkeeping and reporting requirements.

(a) Records of the measurements required in §60.734 of this subpart shall be retained for at least 2 years.

(b) Each owner or operator who uses a wet scrubber to comply with §60.732 shall determine and record once each day, from the recordings of the monitoring devices in §60.734(d), an arithmetic average over a 2-hour period of both the change in pressure of the gas stream across the scrubber and the flowrate of the scrubbing liquid.

(c) Each owner or operator shall submit written reports semiannually of exceedances of control device operating parameters required to be monitored by §60.734 of this subpart. For the purpose of these reports, exceedances are defined as follows:

(1) All 6-minute periods during which the average opacity from dry control devices is greater than 10 percent; or

(2) Any daily 2-hour average of the wet scrubber pressure drop determined as described in §60.735(b) that is less than 90 percent of the average value recorded according to §60.736(c) during the most recent performance test that demonstrated compliance with the particulate matter standard; or

(3) Each daily wet scrubber liquid flow rate recorded as described in §60.735(b) that is less than 80 percent or greater than 120 percent of the average value recorded according to §60.736(c) during the most recent performance test that demonstrated compliance with the particulate matter standard.

(d) The requirements of this section remain in force until and unless the Agency, in delegating enforcement authority to a State under section 111(c) of the Clean Air Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such State. In that event, affected facilities within the State will be relieved of the obligation to comply with this section provided that they comply with the requirements established by the State.

[57 FR 44503, Sept. 28, 1992, as amended at 58 FR 40591, July 29, 1993]

§ 60.736 Test methods and procedures.

(a) In conducting the performance tests required in §60.8, the owner or operator shall use the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in §60.8(b).

(b) The owner or operator shall determine compliance with the particulate matter standards in §60.732 as follows:

(1) Method 5 shall be used to determine the particulate matter concentration. The sampling time and volume for each test run shall be at least 2 hours and 1.70 dscm.

(2) Method 9 and the procedures in §60.11 shall be used to determine opacity from stack emissions.

(c) During the initial performance test of a wet scrubber, the owner or operator shall use the monitoring devices of §60.734(d) to determine the average change in pressure of the gas stream across the scrubber and the average flowrate of the scrubber liquid during each of the particulate matter runs. The arithmetic averages of the three runs shall be used as the baseline average values for the purposes of §60.735(c).

§ 60.737 Delegation of authority.

(a) In delegating implementation and enforcement authority to a State under section 111(c) of the Act, the authorities contained in paragraph (b) of this section shall be retained by the Administrator and not transferred to a State.

(b) Authorities which will not be delegated to States: No restrictions.

Indiana Department of Environmental Management
Office of Air Quality

Addendum to the Technical Support Document (ATSD) for a Significant Source Modification and a Significant Permit Modification

Source Background and Description

Source Name:	**General Motors LLC**
Source Location:	**105 GM Drive, Bedford, IN 47421**
County:	**Lawrence**
SIC Code:	**3363 and 3365**
Operation Permit No.:	**093-26058-00007**
Operation Permit Issuance Date:	**May 22, 2009**
Significant Source Modification No.:	**093-29425-00007**
Significant Permit Modification No.:	**093-29428-00007**
Permit Reviewer:	**Jillian Bertram**

On November 13, 2010, the Office of Air Quality (OAQ) had a notice published in the Times-Mail, Bedford, Indiana, stating that General Motors, LLC had applied for a significant source and permit modification relating to the installation of a Semi-Permanent Molding process at the source. The notice also stated that the OAQ proposed to issue significant source and permit modifications 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

On December 9, 2010, General Motors, LLC submitted comments to IDEM, OAQ on the draft significant source and permit modification.

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 has been revised. The comments and revised permit language are provided below with deleted language as ~~strikeouts~~ and new language **bolded**.

Comment 1:

A note should be added on the limited PTE after issuance page of the calculations sheet to state the underlying rule for the limit of 24.90 tons per year of VOC for the Sand Reclaim units.

Response to Comment 1:

IDEM agrees with the recommended changes, since it provides additional clarity. See ATSD App A for the changes. No permit modification is necessary due to this comment.

Comment 2:

Based on Condition D.6.1, the limited potential to emit of Core Make 1 through 5 should be equal to 114.31 tons per year. This should be corrected in the limited PTE table of the calculations.

Response to Comment 2:

IDEM agrees with the recommended changes, since this corrects an error in the limited table. See ATSD App A for the changes. No permit modification is necessary due to this comment.

Comment 3:

A typographical error in the spelling of furnace for the aging furnaces should be corrected

throughout the permit.

Response to Comment 3:

IDEM agrees with the recommended changes, since it corrects a typographical error. See ATSD App A for the changes. No permit modification is necessary due to this comment.

Comment 4:

It should be stated that the capacity used in calculating emissions from the SPM Lines 1-3 is only the capacity of metal.

Response to Comment 4:

IDEM agrees with the recommended changes, since the emission factors are based on capacity of metal and not sand. See ATSD App A for the changes. No permit modification is necessary due to this comment.

Comment 5:

On the Core Make calculations page, the asterisks need explanations.

Response to Comment 5:

IDEM agrees with the recommended changes, since the asterisks are in need of explanations. See ATSD App A for the changes. No permit modification is necessary due to this comment.

Comment 6:

On the Core Machine HAPs calculations, the total emissions of Acetophenone should have three significant figures.

Response to Comment 6:

IDEM agrees with the recommended changes, since it is consistent with the values throughout the worksheet. See ATSD App A for the changes. No permit modification is necessary due to this comment.

Comment 7:

The controlled emissions page of the calculations should include the Stack Melters.

Response to Comment 7:

IDEM agrees with the recommended changes, since the units were inadvertently left off the sheet. See ATSD App A for the changes. No permit modification is necessary due to this comment.

Comment 8:

In the TSD, the emission unit descriptions should be revised to accurately reflect the capacity of the core sand mixers.

Response to Comment 8:

IDEM, OAQ does not make any changes to the original TSD, but the Permit has been revised.

Comment 9:

In the TSD, the total PTE of the modification before controls should be updated to match the calculations.

Response to Comment 9:

IDEM, OAQ does not make any changes to the original TSD. There are no changes to the permit due to this comment. The revised table is provided below.

PTE Before Controls of the Modification	
Pollutant	**Potential To Emit** (ton/yr)
PM	334.03
PM_{10}	163.90
SO_2	424.37
VOC	99.93
CO	48.54
NO_X	45.03
Single HAPs	<10
Total HAPs	< 25

Comment 10:
In the TSD, the potential to emit after issuance table should be updated to match the calculations.

Response to Comment 10:
IDEM, OAQ does not make any changes to the original TSD. There are no changes to the permit due to this comment. See ATSD App A for the revised table.

Comment 11:
In the TSD, revise the modified limits section to clarify the types of materials that can be melted at the facility.

Response to Comment 11:
IDEM, OAQ does not make any changes to the original TSD, but the Permit has been revised.

Comment 12:
In the TSD, clarify that the facility is only subject to 40 CFR 63, Subpart RRR because it operates a thermal chip dryer.

Response to Comment 12:
IDEM, OAQ does not make any changes to the original TSD. There are no changes to the permit due to this comment. See below for this clarification.

> This area source is an aluminum die casting facility and an aluminum foundry, and therefore is subject to the requirements of the National Emissions Standards for Hazardous Air Pollutants for Secondary Aluminum Production (40 CFR 63.150, Subpart RRR) only because it operates a thermal chip dryer. No furnace is subject to the requirements of this subpart because the furnaces only melt clean charge, internal scrap, and customer returns.

Comment 13:
In the TSD, update the applicable portions of 40 CFR 63, Subpart RRR.

Response to Comment 13:
IDEM, OAQ does not make any changes to the original TSD, but the Permit has been revised.

Comment 14:
In the TSD, update the applicable portions of 40 CFR 63, Subpart ZZZZ.

Response to Comment 14:
IDEM, OAQ does not make any changes to the original TSD, but the Permit has been revised.

Comment 15:

In the TSD, clarify that 40 CFR 63, Subpart HHHHHH also does not apply because the coatings meet the definition of "temporary protective coatings".

Response to Comment 15:

IDEM, OAQ does not make any changes to the original TSD. There are no changes to the permit due to this comment. See below for a revised explanation.

> The coating operation is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs): Paint Stripping and Miscellaneous Surface Coating at Area Sources, Subpart HHHHHH because the coatings used do not contain chromium (Cr), lead (Pb), manganese (Mn), nickel (Ni), or cadmium (Cd), collectively referred to as the target HAP and because the coatings meet the definition of temporary protective coatings in 40 CFR 63.11180
>
> .

Comment 16:

In the TSD, the CAM applicability table states that CAM is applicable to the Core Make units. The potential to emit of each pollutant from each machine is less than the Part 70 threshold; therefore, CAM does not apply.

Response to Comment 16:

IDEM, OAQ does not make any changes to the original TSD. There are no changes to the permit due to this comment. See below for a revised table.

CAM Applicability Analysis								
Emission Unit	**Pollutant**	**Control Device Used**	**Emission Limitation** (Y/N)	**Uncontrolled PTE** (ton/yr)	**Controlled PTE** (ton/yr)	**Part 70 Major Source Threshold** (ton/yr)	**CAM Applicable** (Y/N)	**Large Unit** (Y/N)
SPM Line 1	PM	Baghouse	N	-	-	-	N	-
SPM Line 1	PM10	Baghouse	N	-	-	-	N	-
SPM Line 2	PM	Baghouse	N	-	-	-	N	-
SPM Line 2	PM10	Baghouse	N	-	-	-	N	-
SPM Line 3	PM	Baghouse	N	-	-	-	N	-
SPM Line 3	PM10	Baghouse	N	-	-	-	N	-
Core Make 1	SO2	Scrubber	Y	84.10	2.51	100	N	-
Core Make 2	SO2	Scrubber	Y	84.10	2.51	100	N	-
Core Make 3	SO2	Scrubber	Y	84.10	2.51	100	N	-
Core Make 4	SO2	Scrubber	Y	84.10	2.51	100	N	-
Core Make 5	SO2	Scrubber	Y	84.10	2.51	100	N	-
Sand Mixing and Handling	PM	Baghouse	Y	93.66	1.86	100	N	-
Sand Mixing and Handling	PM10	Baghouse	Y	14.05	0.28	100	N	-
Sand Reclaim	PM	Baghouse	Y	94.66	0.95	100	N	-
Sand Reclaim	PM10	Baghouse	Y	14.39	0.14	100	N	-

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Comment 17:

In the TSD, the 326 IAC 6-3-2 limit for the SPM lines is based on a process weight rate of 1.6 tons per hour. The process weight rate of the units is 3.6 tons per hour. The limits should be updated as such.

Response to Comment 17:

IDEM, OAQ does not make any changes to the original TSD but the Permit has been revised. See below for a revised explanation.

SPM Line 1

(a) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from SPM Line 1 shall not exceed 9.67 pounds per hour when operating at a process weight rate of 3.6 tons per hour. The pound per hour limitation was calculated with the following 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

Operation of the baghouse is not required to comply with this limit.

SPM Line 2

(b) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from SPM Line 2 shall not exceed 9.67 pounds per hour when operating at a process weight rate of 3.6 tons per hour. The pound per hour limitation was calculated with the following 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

Operation of the baghouse is not required to comply with this limit.

SPM Line 3

(c) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from SPM Line 3 shall not exceed 9.67 pounds per hour when operating at a process weight rate of 3.6 tons per hour. The pound per hour limitation was calculated with the following 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

Operation of the baghouse is not required to comply with this limit.

Comment 18:

In the TSD, the 326 IAC 6-3-2 limit for the sand reclamation operation is based on a process weight rate of 3 tons per hour. The process weight rate of the units is 6 tons per hour. The limits should be updated as such.

Response to Comment 18:

IDEM, OAQ does not make any changes to the original TSD but the Permit has been revised. See below for a revised explanation.

Sand Reclaim

(a) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the sand reclamation operation shall not exceed 13.61 pounds per hour when operating at a process weight rate 6 tons per hour. The pound per hour limitation was calculated with the following 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 baghouse shall be in operation at all times the sand reclamation operation is in operation, in order to comply with this limit.

Comment 19:
In the TSD, the summary of testing requirements table needs to be updated to reflect the limits contained in the permit for the sand mixing and handling operation and the sand reclamation operation. The five year frequency of testing needs to be removed from the sand reclamation operation VOC testing.

Response to Comment 19:
IDEM, OAQ does not make any changes to the original TSD but the Permit has been revised. IDEM agrees that the limits should be updated to match the permit. IDEM agrees that the testing frequency should be revised see Response to Comment 31, below. See below for a revised table.

Summary of Testing Requirements						
Emission Unit	**Control Device**	**Timeframe for Testing**	**Pollutant**	**Frequency of Testing**	**Limit or Requirement**	**Underlying Rule**
Core Make 1 through 5	Scrubber	180 days after start-up	SO2	5 years	4.35 lb/ton of core	326 IAC 2-2
Sand mixing and handling	Baghouse	180 days after start-up	PM	5 years	0.21 lb/ton of sand	326 IAC 2-2 326 IAC 6-3-2
Sand Reclamation	Baghouse	180 days after start-up	PM	5 years	0.38 lb/ton of sand	326 IAC 2-2
Sand Reclamation		180 days after start-up	VOC	One Time	0.94 lb/ton of sand	326 IAC 2-2 326 IAC 8-1-6

Comment 20:
The lettering of units in Condition A.2 of the permit is not chronological and needs to be updated.

Response to Comment 20:
IDEM agrees with the recommended changes, since the lettering is not chronological. The permit has been revised as follows:

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

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

***

SPM Melting Operations

~~(n)~~**(g)** Three (3) natural gas-fired stack melting furnaces, identified as Line 1 Stack Melter, Line 2 Stack Melter, and Line 3 Stack Melter, approved for construction in 2010, each with a nominal capacity of five (5) tons of metal per hour, 0.1955 pounds of inorganic flux per ton of metal, and 0.1019 pounds of organic flux per ton of metal, and each with a heat input capacity of 11.1 MMBtu/hr with emissions from each controlled by a baghouse.

Semi-Permanent Mold (SPM) Lines

~~(o)~~**(h)** Three (3) Semi-Permanent Mold (SPM) Lines consisting of pouring, cooling, and extraction, identified as SPM Line 1, SPM Line 2, and SPM Line 3, approved for construction in 2010, each with a nominal capacity of 60 molds per hour using 1.6 tons of molten aluminum and 2 tons of core sand per hour, with emissions from each controlled by a baghouse.

~~(p)~~**(i)** Three (3) finishing lines consisting of milling, hammer and vibratory decore, pin gauge and saw riser, robotic defin, and manual defin, identified as Finishing Lines 1-3, approved for construction in 2010, with a nominal capacity of 4815 pounds per hour each, with emissions controlled by a dust collector.

Core Room Operations

~~(q)~~**(j)** Three (3) core sand silos with sand handling equipment, identified collectively as Sand Handling, approved for construction in 2010, each with a capacity of 60 tons, with emissions from all controlled by a baghouse.

~~(r)~~**(k)** Two (2) core sand mixers, identified as Sand Mix 1 and Sand Mix 2, approved for construction in 2010, with a maximum total nominal capacity of 11.2522.5 tons per hour, each, with one unit operating and one unit as a backup, with emissions from each controlled by baghouse.

~~(s)~~**(l)** Five (5) epoxy acrylic core machines, identified as Core Make 1 through 5, approved for construction in 2010, each with a maximum capacity of 2.64 tons of cores per hour with 1.3% resin content, each using approximately 16 pounds per hour ton of sulfur dioxide catalyst, with four operating and one unit as a backup, with emissions from all controlled by a caustic scrubber.

Comment 21:

Revise the description of the emission units in Condition A.2 of the permit to accurately represent the correct capacities.

Response to Comment 21:

IDEM agrees with the recommended changes, since the descriptions will be more accurate. The permit has been revised as follows:

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

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

***

Semi-Permanent Mold (SPM) Lines

(o) Three (3) Semi-Permanent Mold (SPM) Lines consisting of pouring, cooling, and extraction, identified as SPM Line 1, SPM Line 2, and SPM Line 3, approved for construction in 2010, each with a nominal capacity of 60 molds per hour using 1.6 tons of molten aluminum and 2 tons of core sand per hour, with emissions from each controlled by a baghouse.

~~(p) Three (3) finishing lines consisting of milling, hammer and vibratory decore, pin gauge and saw riser, robotic defin, and manual defin, identified as Finishing Lines 1-3, approved for construction in 2010, with a nominal capacity of 4815 pounds per hour each, with emissions controlled by a baghouse.~~

Core Room Operations

(q) Three (3) core sand silos with sand handling equipment, identified collectively as Sand Handling, approved for construction in 2010, each with a capacity of 60 tons, with emissions from all controlled by a baghouse.

(r) Two (2) core sand mixers, identified as Sand Mix 1 and Sand Mix 2, approved for construction in 2010, with a ~~maximum total~~ nominal capacity of ~~11.25~~ 22.5 tons per hour, each, with one unit operating and one unit as a backup, with emissions from each controlled by baghouse.

(s) Five (5) epoxy acrylic core machines, identified as Core Make 1 through 5, approved for construction in 2010, each with a maximum capacity of 2.64 tons of cores per hour with 1.3% resin content, each using approximately 16 pounds per ~~hour~~ ton of sulfur dioxide catalyst, with four operating and one unit as a backup, with emissions from all controlled by a caustic scrubber.

~~(t) Three (3) core sand silos with sand handling equipment, identified collectively as Sand Handling, approved for construction in 2010, each with a capacity of 60 tons per hour, with emissions from all controlled by a baghouse.~~

(u) One (1) natural gas-fired thermal sand reclamation system, identified as Sand Reclaim, with a maximum nominal capacity of 6.0 tons of sand per hour and a maximum heat input of 6.0 MMBtu/hr, with emissions controlled by a baghouse. [An affected facility under NSPS UUU].

~~(v) Three (3) finishing lines consisting of milling, hammer and vibratory decore, pin gauge and saw riser, robotic defin, and manual defin, identified as Finishing Lines 1-3, approved for construction in 2010, with a maximum capacity of 4815 pounds per hour each, with emissions controlled by a dust collector.~~

Comment 22:

Revise the year for testing mentioned in Condition D.1.5 should be updated to 2015. Also, the PM10 testing paragraph should be removed and the PM10 testing requirement should be combined into the previous paragraph.

Response to Comment 22:

IDEM agrees with the recommended changes, since the 2010 tests have already been completed and the change in language represents IDEM's most current PM10 testing model language. The permit has been revised as follows:

D.1.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

~~(a)~~ Pursuant to SSM 093-13639-00007, issued June 16, 2002, by August 25, 201~~0~~**5**, the Permittee shall perform PM, **PM10,** and VOC testing using methods as approved by the Commissioner, in order to demonstrate compliance with Conditions D.1.1 and D.1.2. These tests shall be repeated at least five (5) years from the date of this valid compliance demonstration. Section C- Performance Testing contains the Permittee's obligation with regard to performance testing.

~~(b) In order to demonstrate compliance with Condition D.1.1, the Permittee shall perform PM10 testing for the baghouse within 180 days of publication of the new or revised condensable PM10 and PM2.5 test method(s) referenced in the U. S. EPA's Final Rule for Implementation of the New Source Review (NSR) Program for Particulate Matter Less Than 2.5 Micrometers (PM2.5), signed on May 8th, 2008 or within 180 days of issuance of this permit, whichever is later. This testing shall be conducted utilizing methods as approved by the Commissioner. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Section C - Performance Testing contains the Permittee's obligation with regard to performance testing. PM10 includes filterable and condensable PM10.~~

Comment 23:

"Permittee" is spelled incorrectly in Condition D.1.7(a) of the permit and should be corrected.

Response to Comment 23:

IDEM agrees with the recommended changes, since there was a typographical error . The permit has been revised as follows:

D.1.7 Parametric Monitoring

(a) The Permittee shall record the pressure drop across the thermal chip dryer baghouse at least once per day when the thermal chip dryer is in operation. When for any one 15-minute block average reading, the pressure drop across the baghouse is outside the normal range of 0.2 to 7.0 inches of water, the Permittee shall take reasonable response steps. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit. Section C--Compliance Response Plan -Preparation, Implementation, Records, and Reports contains the Permitte**e**'s obligation with regard to response steps.

Comment 24:

The lettering of permit Condition D.2.1 is not chronological and should be fixed. Also, include a sentence at the end of Condition D.2.1 reinforcing that the PSD minor limits are to make 326 IAC 2-2 not applicable to units constructed after 1977.

Response to Comment 24:

IDEM agrees with the recommended changes, since the letters are not chronological and units constructed before 1977 are not subject to 326 IAC 2-2. The permit has been revised as follows:

D.2.1 PSD Minor Limit [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (PSD) not applicable the Permittee shall comply with the following limits:

(a) The total amount of metal melted by all the furnaces combined shall not exceed 175,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

(b) The PM emissions from each of the furnaces, other than furnace DC No. 9, shall not exceed 1.78 pounds per ton of metal melted averaged over the melt cycle.

(c) The PM10 emissions from each of the furnaces, other than furnace DC No. 9, shall not exceed 1.78 pounds per ton of metal melted averaged over the melt cycle.

~~(e)~~**(d)** The PM emissions from furnace DC No. 9 shall not exceed 1.28 pounds per ton of metal melted averaged over the melt cycle.

~~(f)~~**(e)** The PM10 emissions from furnace DC No. 9 shall not exceed 1.28 pounds per ton of metal melted averaged over the melt cycle.

Compliance with the above limit combined with Conditions D.2.1, D.4.1, D.5.1, D.7.1, and the PTE of other emission unit, shall limit PM from the entire source to less than 250 tons per twelve (12) month consecutive period and render 326 IAC 2-2 not applicable to the entire source. **These limits are necessary in order that the source maintain minor PSD status; therefore, the requirements of 326 IAC 2-2 are not applicable to the units constructed after 1977.**

Comment 25:

In the TSD, clarify that the facility is only subject to 40 CFR 63, Subpart RRR because it operates a thermal chip dryer.

Response to Comment 25:

IDEM agrees with the recommended changes, since the chip dryer is the only unit at the source subject to 40 CFR 63, Subpart RRR. The permit has been revised as follows:

D.2.2 HAP Area Source Limits

In order to render the requirements of 326 IAC 2-4.1 not applicable, the Permittee shall comply with the following limits:

***

(g) The Permittee shall melt only clean charge, internal scrap, or customer returns any post-consumer scrap materials in any of the furnaces at this source. **This area source is an aluminum die casting facility and an aluminum foundry, and therefore is subject to the requirements of the National Emissions Standards for Hazardous Air Pollutants for Secondary Aluminum Production (40 CFR 63.150, Subpart RRR) only because it operates a thermal chip dryer. No furnace is subject to the requirements of this subpart because the furnaces only melt clean charge, internal scrap, and customer returns.**

Comment 26:

In permit Condition D.4.1, the 326 IAC 6-3-2 limit for the SPM lines is based on a process weight rate of 1.6 tons per hour. The process weight rate of the units is 3.6 tons per hour. The limits should be updated as such.

Response to Comment 26:

IDEM agrees with the recommended changes, since the process weight rate to these units is a combination of metal and sand throughput. The permit has been revised as follows:

D.4.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the following units shall be limited as follows when operating at the listed process weight rate:

Unit	Process Weight Rate (ton/hr)	PM Emission Limit (lb/hr)
SPM Line 1	~~1.6~~ **3.6**	~~5.61~~ **9.67**
SPM Line 2	~~1.6~~ **3.6**	~~5.61~~ **9.67**
SPM Line 3	~~1.6~~ **3.6**	~~5.61~~ **9.67**

The pounds per hour limitations were calculated with the following equation:
Interpolation of the data for the process weight rate up to 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

Comment 27:
The emission unit descriptions in permit Condition D.5 should be revised to accurately reflect the capacity of the core sand mixers.

Response to Comment 27:
IDEM agrees with the recommended changes, since the change is consistent with the emission unit descriptions in Condition A.2. The permit has been revised as follows:

SECTION D.5 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(a) Three (3) core sand silos with sand handling equipment, identified collectively as Sand Handling, approved for construction in 2010, each with a capacity of 60 tons ~~per hour~~, with emissions from all controlled by a baghouse.

(b) Two (2) core sand mixers, identified as Sand Mix 1 and Sand Mix 2, approved for construction in 2010, with a ~~total~~ nominal capacity of 22.5 tons per hour, **each,** with one unit operating and one unit as a backup, with emissions from each controlled by baghouse.

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

Comment 28:
"Requirements" is spelled incorrectly in Condition D.5.1 and should be corrected.

Response to Comment 28:

IDEM agrees with the recommended changes, since there is a typographical error. The permit has been revised as follows:

D.5.1 PSD Minor Limit [326 IAC 2-2]

In order to render the ~~requriements~~ **requirements** of 326 IAC 2-2(PSD) not applicable, the Permittee shall comply with the following:

Comment 29:
Revise permit Conditions D.6.5 and D.6.7 to provide clarity regarding the parameters being

monitored.

Response to Comment 29:

IDEM agrees with the recommended changes, since it provides more clarity. The permit has been revised as follows:

D.6.5 Parametric Monitoring

(a) Permittee shall monitor the ~~inlet~~ **liquor** flow rate of the scrubber at least once per day when any of the core make machines is in operation. When for any one reading, the scrubber flow rate is less than 250 gallons per minute, or a value established during the latest stack test, the Permittee shall take reasonable response steps. Section C – Compliance Response Plan Exceedances contains the Permittee's obligation with regard to response steps. A flow rate that is less than the 250 gallons per minute, or a value established during the latest stack test, is not a deviation from this permit. Failure to take response steps in shall be considered a deviation from this permit.

The instrument used for determining the scrubber ~~inlet liquid~~ **liquor** flow rate shall be subject to approval by IDEM, OAQ, and shall be validated at least once per year or as recommended by the manufacturer. The validations shall not be completed in consecutive months. Section C -Instrument Specifications contains the Permittee's obligation with regard to instrument specifications.

(b) The Permittee shall monitor the pH of the scrubber's ~~liquid flow~~ **liquor** ~~pH~~ at least once per day when any of the core make machines are in operation. When for any one reading, the pH is less than 9, the Permittee shall take reasonable response steps. Section C – Compliance Response Plan contains the Permittee's obligation with regard to response steps. A pH that is less than 9, is not a deviation from this permit. Failure to take response steps in shall be considered a deviation from this permit.

The instrument used for determining the scrubber ~~liquid flow~~ **liquor** pH shall be subject to approval by IDEM, OAQ, and shall be ~~calibrated~~ **validated** at least once every six (6) months or as recommended by the manufacturer. Section C -Instrument Specifications contains the Permittee's obligation with regard to instrument specifications.

***

D.6.7 Record Keeping Requirements

(a) To document compliance with Condition D.6.1(b) – PSD Minor Limit, the Permittee shall maintain records of the monthly core throughput to the core make machines.

(b) To document compliance with Condition D.6.5(a), the Permittee shall maintain daily records of the ~~inlet~~ **liquor** flow rate of the scrubber. The Permittee shall include in its daily record when a flow rate is not taken and the reason for the lack of a flow rate (e.g. the process did not operate that day).

(c) In order to document compliance with Condition D.6.5(b), the Permittee shall maintain the daily records of the pH of the ~~outlet liquid~~ **liquor** flow ~~from~~ **of** the scrubber. The Permittee shall include in its daily record when a pH reading is not taken and the reason for the lack of a pH (e.g. the process did not operate that day).

Comment 30:

In permit Condition D.7.2, the 326 IAC 6-3-2 limit for the sand reclamation operation is based on a process weight rate of 3 tons per hour. The process weight rate of the units is 6 tons per hour.

The limits should be updated as such.

Response to Comment 30:

IDEM agrees with the recommended changes, since the limit shoud be based on the correct process weight rate. The permit has been revised as follows:

D.7.2 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the following units shall be limited as follows when operating at the listed process weight rate:

Unit	Process Weight Rate (ton/hr)	PM Emission Limit (lb/hr)
Sand Reclaim	~~3~~ **6**	~~8.56~~ **13.61**

The pounds per hour limitations were calculated with the following equation:
Interpolation of the data for the process weight rate up to 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

Comment 31:

Revise Condition D.7.5 to remove the repeated testing requirement for VOC from the sand reclamation operation

Response to Comment 31:

IDEM agrees with the recommended changes, since the unit is uncontrolled therefore testing should only be required one time. The permit has been revised as follows:

D.7.5 Testing Requirements [326 IAC 2-1.1-11]

(a) In order to demonstrate compliance with Condition D.7.1(a), the Permittee shall perform PM testing for the baghouse within one hundred and eighty (180) days of start-up of the sand reclamation operation. This testing shall be conducted utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Section C - Performance Testing contains the Permittee's obligation with regard to performance testing.

(b) In order to demonstrate compliance with Condition D.7.1(b), the Permittee shall perform VOC testing for the sand reclamation operation (Sand Reclaim) within one hundred eighty (180) days of start-up of the sand reclamation operation. This testing shall be conducted utilizing methods as approved by the Commissioner. ~~This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration.~~ Section C - Performance Testing contains the Permittee's obligation with regard to performance testing.

Comment 32:

Revise Condition D.7.7 to add the word "drop" after pressure and to clarify that the instrument must be validated once every six months

Response to Comment 32:

IDEM agrees with the recommended changes, since there was a typographical error and validation of monitoring instruments also satisfies the requirement. The permit has been revised

as follows:

D.7.7 Parametric Monitoring

(a) The Permittee shall record the pressure drop across the sand reclamation baghouse at least once per day when the sand reclamation operation is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 0.5 to 7.0 inches of water, the Permittee shall take reasonable response steps. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit. Section C- Compliance Response Plan- Preparation, Implementation, Records, and Reports contains the Permittee's obligation with regard to response steps.

(b) The instruments used for determining the pressure **drop** shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be ~~calibrated~~ **validated** at least once every six (6) months.

Comment 33:

Revise Condition D.7.9(a) because "reclamation" is misspelled.

Response to Comment 33:

IDEM agrees with the recommended changes, since there was a typographical error. The permit has been revised as follows:

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

D.7.9 Record Keeping Requirements

(a) To document compliance with Condition D.7.1(c) – PSD Minor Limit, the Permittee shall maintain monthly records of the sand throughput to the sand recla~~i~~mation operation.

Comment 34:

In permit Condition E.1.2, update the applicable portions of 40 CFR 63, Subpart RRR.

Response to Comment 34:

IDEM agrees with the recommended changes, since the revised list is more accurate. The permit has been revised as follows:

E.1.2 National Emissions Standards for Hazardous Air Pollutants for Secondary Aluminum Production [326 IAC 20-70-1] [40 CFR Part 63, Subpart RRR]]

Pursuant to 40 CFR Part 63, Subpart RRR, the Permittee shall comply with the applicable provisions of 40 CFR Part 63, Subpart RRR (included as Attachment A), which are incorporated by reference as 326 IAC 20-70, for the natural gas-fired aluminum thermal chip dryer, identified as CHIP-2.

At the time of permit issuance, the following provisions were identified as applicable.

(1) 40 CFR 63.1500(a), (c)(1), (f);
(2) 40CFR 63.1503;
(3) 40 CFR 63.1505(a)~~(1)~~,(c)**(2)**~~,(d),(f)~~;
(4) 40 CFR 63.1506(a)(1),(c),(d), and (f); (Comment: (a)(2) and (b) do not apply)
(5) 40 CFR 63.1510(a),(b),(d),(e),(g) and (k);
(6) 40 CFR 63.1511(a), (b) and (c) ; (Comment: Monitoring and operating parameter values already established)
(7) 40 CFR 63.1512(b),(k),(m);
(8) 40 CFR 63.1516(a),(b), and (c); and
(9) 40 CFR 63.1517(a),(b)(2),(b)(6),(b)(7),(b)(9),(b)(14),(b)(15),(b)(16); and

(10) 40 CFR 63 1518.

Pursuant to 40 CFR 63.1510(e), the Permittee shall install, calibrate, operate, and maintain a device to measure and record the total weight of dry chips processed through the natural gas-fired aluminum chip dryer for each operating cycle or time period used in the performance test consistent with US EPA's April 15, 2003 approval of alternative monitoring for the thermal chip dryer.

Comment 35:

In permit Condition E.2.2, update the applicable portions of 40 CFR 63, Subpart ZZZZ.

Response to Comment 35:

IDEM agrees with the recommended changes, since the revised list is more accurate. The permit has been revised as follows:

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

By March 3. 2013, the Permitee shall comply with the following provisions of 40 CFR 63, Subpart ZZZZ as specified is Attachment B of this permit:

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

Comment 35:

In permit Condition E.3.2, update the unit description.

Response to Comment 35:

IDEM agrees with the recommended changes, since 40 CFR 63, Subpart ZZZZZZ applies to the melting furnaces and not the SPM lines. The permit has been revised as follows:

SECTION E.3 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

~~**Semi-Permanent Mold (SPM) Lines (units approved for construction in SSM 093-29425-**~~

~~00007)~~

~~(w) Three (3) Semi-Permanent Mold (SPM) Lines consisting of pouring, cooling, and extraction, identified as SPM Line 1, SPM Line 2, and SPM Line 3, approved for construction in 2010, each with a nominal capacity of 60 molds per hour using 1.6 tons of molten aluminum and 2 tons of core sand per hour, with emissions from each controlled by a baghouse.~~

SPM Melting Operations

(g) Three (3) natural gas-fired stack melting furnaces, identified as Line 1 Stack Melter, Line 2 Stack Melter, and Line 3 Stack Melter, approved for construction in 2010, each with a nominal capacity of five (5) tons of metal per hour, 0.1955 pounds of inorganic flux per ton of metal, and 0.1019 pounds of organic flux per ton of metal, and each with a heat input capacity of 11.1 MMBtu/hr with emissions from each controlled by a baghouse.

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

Comment 36:

Update the limits on the quarterly reporting forms.

Response to Comment 36:

IDEM agrees with the recommended changes, since the limits need to be updated to match the underlying permit conditions. The permit has been revised as follows:

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

Part 70 Quarterly Report

Source Name:	General Motors LLC
Source Address:	105 GM Drive, Bedford, Indiana 47421
Part 70 Permit No.:	T 093-26058-00007
Facility:	sand mixing and handling operation
Parameter:	Amount of sand processed
Limit:	Less than ~~52034.4~~ **52560** tons of metal per twelve (12) consecutive month period with compliance determined at the end of each month.

***

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

Part 70 Quarterly Report

Source Name:	General Motors LLC
Source Address:	105 GM Drive, Bedford, Indiana 47421
Part 70 Permit No.:	T 093-26058-00007
Facility:	Core Make Machines
Parameter:	Amount of core processed
Limit:	Less than 52560 tons of ~~metal~~ **sand** per twelve (12) consecutive month period with compliance determined at the end of each month.

***

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

Part 70 Quarterly Report

Source Name:	General Motors LLC
Source Address:	105 GM Drive, Bedford, Indiana 47421
Part 70 Permit No.:	T 093-26058-00007
Facility:	Sand reclamation operation
Parameter:	Amount of sand processed
Limit:	Less than 52560 tons of ~~metal~~ **sand** per twelve (12) consecutive month period with compliance determined at the end of each month.

IDEM Contact

(a) Questions regarding this proposed significant source and permit modification can be directed to Jillian Bertram 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)233-1782 or toll free at 1-800-451-6027 extension (3-1782).

(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

Appendix A: Emission Calculations
Source-wide Limited PTE Summary after Modification

Company Name: General Motors, LLC
Address City IN Zip: 105 GM Drive, Bedford, IN 47421
Permit No.: T093-29425-00007, T093-29428-00007
Reviewer: Jillian Bertram

* Limit is to avoid 326 IAC 2-2, limits come from a 175,000 ton/yr throughput limit and limits requested by the souce
** Limit is to avoid being a major source of HAPs
*** Emission Factor is limited to avoid 326 IAC 2-2
**** Emission Factor is limited to avoid 326 IAC 2-2 and 326 IAC 8-1-6

	Limited Emissions (tons/yr)							
Emission Unit	**PM**	**PM10**	**SO2**	**NOx**	**VOC**	**CO**	**Single HAP**	**Total HAP**
Chip Dryer Process	45.50*	45.50*	0.00	0.00	66.58*	0.00	0.00	0.00
Chip Dryer Combustion	0.06	0.06	0.02	2.99	0.16	2.51	0.05	0.06
All furnaces	155.75*	155.75*	0.67	112.53	6.19	94.52	4.99	7.36**
SPM Line 1	9.39	5.47	1.21	0.00	24.53	3.57	1.04	4.86
SPM Line 2	9.39	5.47	1.21	0.00	24.53	3.57	1.04	4.86
SPM Line 3	9.39	5.47	1.21	0.00	24.53	3.57	1.04	4.86
Core Make 1	0.00	0.00		0.00	2.86	0.00	0.04	0.48
Core Make 2	0.00	0.00		0.00	2.86	0.00	0.04	0.48
Core Make 3	0.00	0.00		0.00	2.86	0.00	0.04	0.48
Core Make 4	0.00	0.00		0.00	2.86	0.00	0.04	0.48
Core Make 5	0.00	0.00	114.31*	0.00	2.86	0.00	0.04	0.48
Sand Mix 1	5.57***	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sand Mix 2								
Sand Handling								
Sand Reclaim	10.00*	14.39	0.02	2.63	24.90 ****	2.21	0.05	0.05
Solution HT Furnace 1	0.02	0.10	0.01	1.31	0.07	1.10	0.02	0.02
Solution Ht Furnace 2	0.02	0.10	0.01	1.31	0.07	1.10	0.02	0.02
Aging HT Furnace 1	0.02	0.07	0.01	0.88	0.05	0.74	0.02	0.02
Aging HT Furnace 2	0.08	0.07	0.01	0.88	0.05	0.74	0.02	0.02
Misc. Combustion	0.45	1.78	0.14	23.43	1.29	19.68	0.42	0.44
Coatings	0.00	0.00	0.00	0.00	1.71	0.00	0.00	0.00
Total	**245.65**	**234.22**	**118.80**	**145.96**	**188.93**	**133.32**	**4.99**	**24.99**

Appendix A: Emission Calculations
Unlimited PTE Summary of Modification

Company Name: General Motors, LLC
Address City IN Zip: 105 GM Drive, Bedford, IN 47421
Permit No.: T093-29425-00007, T093-29428-00007
Reviewer: Jillian Bertram
Date: 7/6/2010

Emission Unit	Emissions (tons/yr)							
	PM	PM10	SO2	NOx	VOC	CO	Single HAP	Total HAP
Line 1 Stack Melter	38.98	38.98	0.03	4.86	0.27	4.08	0.09	0.09
Line 2 Stack Melter	38.98	38.98	0.03	4.86	0.27	4.08	0.09	0.09
Line 3 Stack Melter	38.98	38.98	0.03	4.86	0.27	4.08	0.09	0.09
SPM Line 1	9.39	5.47	1.21	0.00	24.53	3.57	1.04	4.86
SPM Line 2	9.39	5.47	1.21	0.00	24.53	3.57	1.04	4.86
SPM Line 3	9.39	5.47	1.21	0.00	24.53	3.57	1.04	4.86
Core Make 1	0.00	0.00	84.10	0.00	2.86	0.00	0.04	0.48
Core Make 2	0.00	0.00	84.10	0.00	2.86	0.00	0.04	0.48
Core Make 3	0.00	0.00	84.10	0.00	2.86	0.00	0.04	0.48
Core Make 4	0.00	0.00	84.10	0.00	2.86	0.00	0.04	0.48
Core Make 5	0.00	0.00	84.10	0.00	2.86	0.00	0.04	0.48
Sand Mix 1	93.66	14.05	0.00	0.00	0.00	0.00	0.00	0.00
Sand Mix 2								
Sand Handling								
Sand Reclaim	94.66	14.39	0.02	2.63	8.03	2.21	0.05	0.05
Solution HT Furnace 1	0.02	0.10	0.01	1.31	0.07	1.10	0.02	0.02
Solution HT Furnace 2	0.02	0.10	0.01	1.31	0.07	1.10	0.02	0.02
Aging HT Furnace 1	0.02	0.07	0.01	0.88	0.05	0.74	0.02	0.02
Aging HT Furnace 2	0.08	0.07	0.01	0.88	0.05	0.74	0.02	0.02
Misc. Combustion	0.45	1.78	0.14	23.43	1.29	19.68	0.42	0.44
Coatings	0.00	0.00	0.00	0.00	1.71	0.00	0.00	0.00
Total	**334.03**	**163.90**	**424.37**	**45.03**	**99.93**	**48.54**	**4.16**	**17.85**

Appendix A: Emission Calculations
Stack Melters

Company Name: **General Motors, LLC**

Address
City IN Zip: **105 GM Drive, Bedford, IN 47421**
Permit No.: **T093-29425-00007, T093-29428-00007**
Reviewer: **Jillian Bertram**
Date: **7/6/2010**

Emission Factors

PM	1.7800	lb/ton *
PM10	1.7800	lb/ton*
PM2.5	1.7800	lb/ton*
SOx	0.6000	lb/MMCF**
NOx	100.0000	lb/MMCF**
VOC	5.5000	lb/MMCF**
CO	84.0000	lb/MMCF**
Pb	0.0005	lb/MMCF**

* Emission factors are "alternate" emission factors determined for aluminum melting in previous approvals.
** 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

Methodology

Emissions (tons/yr) = EF (lb/ton) * Capacity (tons Al/hr) * 8760 (hr/yr) * 1/2000 (tons/lb)
Emissions (tons/yr) = EF (lb/MMCF) * Capacity (MMCF/yr) * 1/2000 (tons/lb)
Capacity (MMCF/yr) = Capacity (MMBtu/hr) * 8.76

Emission Unit	Capacity			Emissions (tons/yr)							
	(tons Al/hr)	(MMBtu/hr)	(MMCF/yr)	PM	PM10	PM2.5	SOx	NOx	VOC	CO	Pb
Line 1 Stack Melter	5.00	11.10	97.24	38.98	38.98	38.98	0.03	4.86	0.27	4.08	0.00
Line 2 Stack Melter	5.00	11.10	97.24	38.98	38.98	38.98	0.03	4.86	0.27	4.08	0.00
Line 3 Stack Melter	5.00	11.10	97.24	38.98	38.98	38.98	0.03	4.86	0.27	4.08	0.00
			Total	**116.95**	**116.95**	**116.95**	**0.09**	**14.59**	**0.80**	**12.25**	**0.00**

Appendix A: Emission Calculations
Stack Melters HAPs

Company Name:	**General Motors, LLC**
Address City IN Zip:	**105 GM Drive, Bedford, IN 47421**
Permit No.:	**T093-29425-00007, T093-29428-00007**
Reviewer:	**Jillian Bertram**
Date:	**7/6/2010**

Pollutant	Organic EF	Inorganic EF	Units
HCl	0.490	0.004	lb/lb flux
HF	0.007	0.004	lb/lb flux

Methodology

Emissions (tons/yr) = (Organic EF (lb/lb flux) * Organic Capacity (lb flux/yr) * 1/2000 (tons/lb))+(Inorganic EF (lb/lb flux) * Inorganic Capacity (lb flux/yr) * 1/2000 (tons/lb))

Emission factors are "alternate" factors determined for aluminum melting in previous approvals.

	Capacity (lb flux/yr)		Emissions (tons/yr)	
Emission Unit	**Organic**	**Inorganic**	**HCl**	**HF**
Line 1 Stack Melter	1428.23	2740.13	0.36	0.01
Line 2 Stack Melter	1428.23	2740.13	0.36	0.01
Line 3 Stack Melter	1428.23	2740.13	0.36	0.01
		Total	**1.07**	**0.03**

Appendix A: Emission Calculations
Stack Melters HAPs

Company Name: General Motors, LLC
Address City IN Zip: 105 GM Drive, Bedford, IN 47421
Permit No.: T093-29425-00007, T093-29428-00007
Reviewer: Jillian Bertram
Date: 7/6/2010

HAP	Emission Factor (lbs/MMCF)
2-Methylnapthalene	0.00002
7,12Dimethylbenz(a)anthracene	0.00002
Benzene	0.00210
Dichlorobenzene	0.00120
Formaldehyde	0.07500
Hexane	1.80000
Napthalene	0.00061
Phenanathrene	0.00002
Toluene	0.00340
Arsenic	0.00020
Barium	0.00440
Beryllium	0.00001
Cadmium	0.00110
Chromium	0.00140
Cobalt	0.00008
Manganese	0.00038
Mercury	0.00026
Nickel	0.00210
Selenium	0.000024

	Emissions (tons/yr)			
	Line 1 Stack Melter	Line 2 Stack Melter	Line 3 Stack Melter	Total
Capacity (MMCF/yr)	97.24	97.24	97.24	291.72
2-Methylnapthalene	0.0000	0.0000	0.0000	0.0000
7,12Dimethylbenz(a)anthracene	0.0000	0.0000	0.0000	0.0000
Benzene	0.0001	0.0001	0.0001	0.0003
Dichlorobenzene	0.0001	0.0001	0.0001	0.0002
Formaldehyde	0.0036	0.0036	0.0036	0.0109
Hexane	0.0875	0.0875	0.0875	0.2625
Napthalene	0.0000	0.0000	0.0000	0.0001
Phenanathrene	0.0000	0.0000	0.0000	0.0000
Toluene	0.0002	0.0002	0.0002	0.0005
Arsenic	0.0000	0.0000	0.0000	0.0000
Barium	0.0002	0.0002	0.0002	0.0006
Beryllium	0.0000	0.0000	0.0000	0.0000
Cadmium	0.0001	0.0001	0.0001	0.0002
Chromium	0.0001	0.0001	0.0001	0.0002
Cobalt	0.0000	0.0000	0.0000	0.0000
Manganese	0.0000	0.0000	0.0000	0.0001
Mercury	0.0000	0.0000	0.0000	0.0000
Nickel	0.0001	0.0001	0.0001	0.0003
Selenium	0.0000	0.0000	0.0000	0.0000
			Total	**0.2760**

* Emission factors are from Section 1.4, AP-42, 5th edition, July 1998.

Methodology

Emissions (tons/yr) = EF (lbs/MMCF) * Capacity (MMCF/yr)* 1/2000 (lbs/ton)

Appendix A: Emission Calculations
Pouring, Cooling, and Extraction

Company Name: **General Motors, LLC**

Address
City IN Zip: **105 GM Drive, Bedford, IN 47421**
Permit No.: **T093-29425-00007, T093-29428-00007**
Reviewer: **Jillian Bertram**
Date: **7/6/2010**

Emission Factors

PM	1.3400	lbs/ton **
PM10	0.7800	lbs/ton **
PM2.5	0.4200	lbs/ton **
SOx	0.1720	lbs/ton *
NOx	0.0000	lbs/ton *
VOC	3.5000	lbs/ton *
CO	0.5100	lbs/ton *

* Emission factors are from a stack test at Technikon in Sacramento, CA, February 2008, Epoxy Acrylic Pouring, Cooling, and Shakeout

** Emission Factors are recalculated from AP-42, 1995, Tables 12.10-7 and 12.10-9

Methodology

Emissions (tons/yr) = EF (lbs/ton) * Capacity (tons/hr) * 8760 (hr/yr) * 1/2000 (tons/lb)

Emission Unit	Capacity (tons/hr) of metal	Emissions (tons/yr)						
		PM	PM10	PM2.5	SOx	NOx	VOC	CO
SPM Line 1	1.60	9.39	5.47	2.94	1.21	0.00	24.53	3.57
SPM Line 2	1.60	9.39	5.47	2.94	1.21	0.00	24.53	3.57
SPM Line 3	1.60	9.39	5.47	2.94	1.21	0.00	24.53	3.57
	Total	**28.17**	**16.40**	**8.83**	**3.62**	**0.00**	**73.58**	**10.72**

Appendix A: Emission Calculations
Pouring, Cooling, and Extraction HAPs

Company Name: General Motors, LLC
Address City IN Zip: 105 GM Drive, Bedford, IN 47421
Permit No.: T093-29425-00007, T093-29428-00007
Reviewer: Jillian Bertram
Date: 7/6/2010

HAP	Emission Factor (lbs/ton)
Cresol	0.14900
Isopropylbenzene	0.11800
Ethylene Glycol	0.10200
Acetaldehyde	0.07020
Acetophenone	0.03250
Ethylbenzene	0.03010
Propionaldehyde	0.02940
Toluene	0.02440
Biphenyl	0.02200
Phenol	0.01830
Methylnapthalene, 2-	0.01710
Cresol, o-	0.01430
Styrene	0.01080
Methylnapthalene, 1-	0.00842
Xylene, mp-	0.00787
Benzene	0.00738
Other HAPs	0.03223
Total HAPs	0.69400

	Emissions (tons/yr)			
	SPM Line 1	SPM Line 2	SPM Line 3	Total
Capacity (tons/yr)	14016.00	14016.00	14016.00	42048.00
Cresol	1.04	1.04	1.04	**3.13**
Isopropylbenzene	0.83	0.83	0.83	2.48
Ethylene Glycol	0.71	0.71	0.71	2.14
Acetaldehyde	0.49	0.49	0.49	1.48
Acetophenone	0.23	0.23	0.23	0.68
Ethylbenzene	0.21	0.21	0.21	0.63
Propionaldehyde	0.21	0.21	0.21	0.62
Toluene	0.17	0.17	0.17	0.51
Biphenyl	0.15	0.15	0.15	0.46
Phenol	0.13	0.13	0.13	0.38
Methylnapthalene, 2-	0.12	0.12	0.12	0.36
Cresol, o-	0.10	0.10	0.10	0.30
Styrene	0.08	0.08	0.08	0.23
Methylnapthalene, 1-	0.06	0.06	0.06	0.18
Xylene, mp-	0.06	0.06	0.06	0.17
Benzene	0.05	0.05	0.05	0.16
Other HAPs	0.23	0.23	0.23	0.68
Total HAPs	4.86	4.86	4.86	**14.59**

* Emission factors arefrom a stack test at Technikon in Sacramento, CA, February 2008, Epoxy Acrylic Pouring, Cooling, and Shakeout

Methodology

Emissions (tons/yr) = EF (lbs/ton) * Capacity (tons/yr)* 1/2000 (lbs/ton)

Appendix A: Emission Calculations
Core Machines HAPs

Core Machines

Company Name: **General Motors, LLC**

Address
City IN Zip: **105 GM Drive, Bedford, IN 47421**
Permit No.: **T093-29425-00007, T093-29428-00007**
Reviewer: **Jillian Bertram**
Date: **7/6/2010**

Emission Factors

PM	0.0000	lbs/ton sand***
PM10	0.0000	lbs/ton sand***
PM2.5	0.0000	lbs/ton sand***
SOx	16.0000	lbs/ton sand**
NOx	0.0000	lbs/ton sand
VOC	0.5433	lbs/ton sand*
CO	0.0000	lbs/ton sand

* Emission factors are from a stack test at Technikon in Sacramento, CA, February 2008, Epoxy Acrylic Pouring, Cooling, and Shakeout
** Emission factor is based on GM process estimates
*** Particulate Emissions are accounted for in Mixing and Core Sand Handling.

Emission Unit	Capacity (tons sand/hr)*	Emissions (tons/yr) PM	PM10	SOx	NOx	VOC	CO
Core Make 1	1.20	0.00	0.00				
Core Make 2	1.20	0.00	0.00				
Core Make 3	1.20	0.00	0.00	84.10	0.00	2.86	0.00
Core Make 4	1.20	0.00	0.00	84.10	0.00	2.86	0.00
Core Make 5	1.20	0.00	0.00	84.10	0.00	2.86	0.00
	Total	**0.00**	**0.00**	84.10	0.00	2.86	0.00
				84.10	0.00	2.86	0.00
				424.36	**0.00**	**14.28**	**0.00**

* Throughput to the Core Make Machines is limited by throughput to the SPM lines

Appendix A: Emission Calculations

Core Machines HAPs

Company Name: **General Motors, LLC**

Address City IN Zip: **105 GM Drive, Bedford, IN 47421**
Permit No.: **T093-29425-00007, T093-29428-00007**
Reviewer: **Jillian Bertram**
Date: **7/6/2010**

HAP	Emission Factor	
Acetophenone	0.0081	lbs/ton sand
Cumene	0.0835	lbs/ton sand

* Emission factors are from a stack test at Technikon in Sacramento, CA, October 2005, Epoxy Acrylic Core Making

Unit	Capacity (tons/yr)	Emisisons (tons/yr)		
		Acetophenone	Cumene	Total HAPs
Core Make 1	10512.00	0.04	0.44	0.48
Core Make 2	10512.00	0.04	0.44	0.48
Core Make 3	10512.00	0.04	0.44	0.48
Core Make 4	10512.00	0.04	0.44	0.48
Core Make 5	10512.00	0.04	0.44	0.48
	Total	**0.21**	**2.19**	**2.41**

Methodology

Emissions (tons/yr) = Emission Factor (lbs/ton sand) * Capacity (tons/yr) * 1/2000 (ton/lb)

Appendix A: Emission Calculations
Sand Mixers and Handling

Company Name: General Motors, LLC
Address City IN Zip: 105 GM Drive, Bedford, IN 47421
Permit No.: T093-29425-00007, T093-29428-00007
Reviewer: Jillian Bertram
Date: 7/6/2010

Pollutant	Emission Factor	
PM	3.6	lb/ton sand *
PM10	0.54	lb/ton sand *
PM2.5	0.54	lb/ton sand**

* Emission Factors are from FIRE Version 6.25 SCC 3-04-003-50
** PM2.5 is considered equal to PM10
*** Maximum input to sand mixers is limited by the capacity of SPM lines

Emission Unit	Capacity (tons/hr) ***	Emissions (tons/yr)		
		PM (tons/yr)	PM10 (tons/yr)	PM2.5 (tons/yr)
Sand Mix 1	5.94	93.66	14.05	14.05
Sand Mix 2				
Sand Handling				

Methodology
Emissions (tons/yr) = EF (lb/ton sand) * Capacity (tons/hr) *8760 (hr/yr) * 1/2000 (tons/lb)

Appendix A: Emission Calculations
Thermal Sand Reclaimation

Company Name: **General Motors, LLC**

Address
City IN Zip: **105 GM Drive, Bedford, IN 47421**
Permit No.: **T093-29425-00007, T093-29428-00007**
Reviewer: **Jillian Bertram**
Date: **7/6/2010**

Emission Factors

PM	3.6019	lb/ton *
PM10	0.5475	lb/ton*
PM2.5	0.5475	lb/ton*
SOx	0.6000	lb/MMCF**
NOx	100.0000	lb/MMCF**
VOC	5.5000	lb/MMCF**
VOC	20.0000	lb/ton***
CO	84.0000	lb/MMCF**

* Emission factors are for SCC 3-04-003-50 plus the emissions from natural gas combustion. PM 2.5 is assumed equal to PM10.
** 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

*** VOCs are from the organic binders in the sand which are assumed to be 1% by weight of the 6 tons/hr sand weight at 98.5% destruction efficiency. VOCs from natural gas combustion are added to the VOC emissions from the organic binders in the sand for the total potential to emit from Sand Reclaim.

Methodology

Emissions (tons/yr) = EF (lb/ton) * Capacity (tons Al/hr) * 8760 (hr/yr) * 1/2000 (tons/lb)
Emissions (tons/yr) = EF (lb/MMCF) * Capacity (MMCF/yr) * 1/2000 (tons/lb)
Capacity (MMCF/yr) = Capacity (MMBtu/hr) * 8.76

Emission Unit	Capacity			Emissions (tons/yr)							
	(tons/hr)	(MMBtu/hr)	(MMCF/yr)	PM	PM10	PM2.5	SOx	NOx	VOC	CO	Pb
Sand Reclaim	6.00	6.00	52.56	94.66	14.39	14.39	0.02	2.63	8.03	2.21	0.00

Appendix A: Emission Calculations
Thermal Sand Reclaimation HAPs

Company Name: General Motors, LLC
Address City IN Zip: 105 GM Drive, Bedford, IN 47421
Permit No.: T093-29425-00007, T093-29428-00007
Reviewer: Jillian Bertram
Date: 7/6/2010

Pollutant	Emission Factor (lbs/MMCF)
Pb	0.00050
Benzene	0.00210
Dichlorobenzene	0.00120
Formaldehyde	0.07500
Hexane	1.80000
Napthalene	0.00061
Toluene	0.00340
Arsenic	0.00020
Barium	0.00440
Cadmium	0.00110
Chromium	0.00140
Manganese	0.00038
Mercury	0.00026
Nickel	0.00210

	Emissions (tons/yr)
	Sand Reclaim 1
Capacity (MMBtu/hr)	6.00
Capacity (MMCF/yr)	52.56
Pb	0.0000
Benzene	0.0001
Dichlorobenzene	0.0000
Formaldehyde	0.0020
Hexane	**0.0473**
Napthalene	0.0000
Toluene	0.0001
Arsenic	0.0000
Barium	0.0001
Cadmium	0.0000
Chromium	0.0000
Manganese	0.0000
Mercury	0.0000
Nickel	0.0001
Total HAPs	**0.0497**

* Emission factors are from Section 1.4, AP-42, 5th edition, July 1998 except as noted.

Methodology

Emissions (tons/yr) = EF (lbs/MMCF) * Capacity (MMCF/yr)* 1/2000 (lbs/ton)

Appendix A: Emission Calculations
Heat Treat

Company Name: General Motors, LLC
Address City IN Zip: 105 GM Drive, Bedford, IN 47421
Permit No.: T093-29425-00007, T093-29428-00007
Reviewer: Jillian Bertram
Date: 7/6/2010

Pollutant	Emission Factor (lbs/MMCF)
PM	1.90000
PM10	7.60000
PM2.5	7.60000
SO2	0.60000
NOx	100.00000
VOC	5.50000
CO	84.00000
Pb	0.00050
Benzene	0.00210
Dichlorobenzene	0.00120
Formaldehyde	0.07500
Hexane	1.80000
Napthalene	0.00061
Toluene	0.00340
Arsenic	0.00020
Barium	0.00440
Cadmium	0.00110
Chromium	0.00140
Manganese	0.00038
Mercury	0.00026
Nickel	0.00210

	Emissions (tons/yr)				
	Solution HT Furnace 1	**Solution HT Furnace 2**	**Aging HT Furnace 1**	**Aging HT Furnace 2**	**Total**
Capacity (MMBtu/hr)	3.00	3.00	2.00	2.00	10.00
Capacity (MMCF/yr)	26.28	26.28	17.52	17.52	87.60
PM	0.0250	0.0250	0.0166	0.0166	0.0832
PM10	0.0999	0.0999	0.0666	0.0666	0.3329
PM2.5	0.0999	0.0999	0.0666	0.0666	0.3329
SO2	0.0079	0.0079	0.0053	0.0053	0.0263
NOx	1.3140	1.3140	0.8760	0.8760	4.3800
VOC	0.0723	0.0723	0.0482	0.0482	0.2409
CO	1.1038	1.1038	0.7358	0.7358	3.6792
Pb	0.0000	0.0000	0.0000	0.0000	0.0000
Benzene	0.0000	0.0000	0.0000	0.0000	0.0001
Dichlorobenzene	0.0000	0.0000	0.0000	0.0000	0.0001
Formaldehyde	0.0010	0.0010	0.0007	0.0007	0.0033
Hexane	**0.0237**	**0.0237**	**0.0158**	**0.0158**	**0.0788**
Napthalene	0.0000	0.0000	0.0000	0.0000	0.0000
Toluene	0.0000	0.0000	0.0000	0.0000	0.0001
Arsenic	0.0000	0.0000	0.0000	0.0000	0.0000
Barium	0.0001	0.0001	0.0000	0.0000	0.0002
Cadmium	0.0000	0.0000	0.0000	0.0000	0.0000
Chromium	0.0000	0.0000	0.0000	0.0000	0.0001
Manganese	0.0000	0.0000	0.0000	0.0000	0.0000
Mercury	0.0000	0.0000	0.0000	0.0000	0.0000
Nickel	0.0000	0.0000	0.0000	0.0000	0.0001
Total HAPs	**0.0249**	**0.0249**	**0.0166**	**0.0166**	**0.0829**

* Emission factors are from Section 1.4, AP-42, 5th edition, July 1998 except as noted.

Methodology

Emissions (tons/yr) = EF (lbs/MMCF) * Capacity (MMCF/yr)* 1/2000 (lbs/ton)

Appendix A: Emissions Calculations
Miscellaneous Natural Gas Combustion

Company Name: General Motors, LLC
Address City IN Zip: 105 GM Drive, Bedford, IN 47421
Permit Number: T093-29425-00007, T093-29428-00007
Reviewer: Jillian Bertram
Date: 7/6/2010

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
53.5	468.7

	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	0.4	1.8	0.1	23.4	1.3	19.7

*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 next page for HAPs emissions calculations.

Appendix A: Emissions Calculations
Miscellaneous Natural Gas Combustion

HAPs Emissions

Company Name: General Motors, LLC
Address City IN Zip: 105 GM Drive, Bedford, IN 47421
Permit Number: T093-29425-00007, T093-29428-00007
Reviewer: Jillian Bertram
Date: 7/6/2010

	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
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	4.921E-04	2.812E-04	1.757E-02	4.218E-01	7.967E-04

	HAPs - Metals				
	Lead	Cadmium	Chromium	Manganese	Nickel
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	1.172E-04	2.578E-04	3.281E-04	8.905E-05	4.921E-04

Methodology is the same as previous page.

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

Appendix A: Emission Calculations
Coatings, Dips, and Solvents

Company Name:	**General Motors, LLC**
Address City IN Zip:	**105 GM Drive, Bedford, IN 47421**
Permit No.:	**T093-29425-00007, T093-29428-00007**
Reviewer:	**Jillian Bertram**
Date:	**7/6/2010**

Coating	VOC Content (lb/gal)	Usage (gal/yr)	VOC (tons/yr)
Metal Cleaner	7.82	438.00	1.71
Release Agent	0.00	1752.00	0.00
		Total	**1.71**

Methodology
VOC (tons/yr) = VOC Content (lb/gal) * Usage (gal/yr) * 1/2000 (ton/lb)
VOC Content is from MSDS forms.
Both Coatings are HAP-free.

Appendix A: Emission Calculations
Controlled Emissions

Company Name: General Motors, LLC
Address City IN Zip: 105 GM Drive, Bedford, IN 47421
Permit No.: T093-29425-00007, T093-29428-00007
Reviewer: Jillian Bertram
Date: 7/6/2010

Emission Unit	Control Device	Pollutant	Uncontrolled PTE (tons/yr)	Capture Efficiency	Control Efficiency	Controlled PTE (tons/yr)	Req.?
SPM Line 1	Baghouse	PM	9.39	99%	99%	0.19	N
SPM Line 1	Baghouse	PM10	5.47	99%	99%	0.11	N
SPM Line 1	Baghouse	PM2.5	2.94	99%	99%	0.06	N
SPM Line 2	Baghouse	PM	9.39	99%	99%	0.19	N
SPM Line 2	Baghouse	PM10	5.47	99%	99%	0.11	N
SPM Line 2	Baghouse	PM2.5	2.94	99%	99%	0.06	N
SPM Line 3	Baghouse	PM	9.39	99%	99%	0.19	N
SPM Line 3	Baghouse	PM10	5.47	99%	99%	0.11	N
SPM Line 3	Baghouse	PM2.5	2.94	99%	99%	0.06	N
Line 1 Stack Melter	Baghouse	PM	38.98	99%	99%	0.78	N
Line 1 Stack Melter	Baghouse	PM10	38.98	99%	99%	0.78	N
Line 1 Stack Melter	Baghouse	PM2.5	38.98	99%	99%	0.78	N
Line 2 Stack Melter	Baghouse	PM	38.98	99%	99%	0.78	N
Line 2 Stack Melter	Baghouse	PM10	38.98	99%	99%	0.78	N
Line 2 Stack Melter	Baghouse	PM2.5	38.98	99%	99%	0.78	N
Line 3 Stack Melter	Baghouse	PM	38.98	99%	99%	0.78	N
Line 3 Stack Melter	Baghouse	PM10	38.98	99%	99%	0.78	N
Line 3 Stack Melter	Baghouse	PM2.5	38.98	99%	99%	0.78	N
Core Make 1	Scrubber	SO2	84.10	98%	99%	2.51	Y
Core Make 2	Scrubber	SO2	84.10	98%	99%	2.51	Y
Core Make 3	Scrubber	SO2	84.10	98%	99%	2.51	Y
Core Make 4	Scrubber	SO2	84.10	98%	99%	2.51	Y
Core Make 5	Scrubber	SO2	84.10	98%	99%	2.51	Y
Sand Mixers and Handling	Baghouse	PM	93.66	99%	99%	1.86	Y
Sand Mixers and Handling	Baghouse	PM10	14.05	99%	99%	0.28	Y
Sand Mixers and Handling	Baghouse	PM2.5	14.05	99%	99%	0.28	Y
Sand Reclaim	Baghouse	PM	94.66	100%	99%	0.95	Y
Sand Reclaim	Baghouse	PM10	14.39	100%	99%	0.14	Y
Sand Reclaim	Baghouse	PM2.5	14.39	100%	99%	0.14	Y
Sand Reclaim	Baghouse	Total HAPs*	0.05	100%	99%	0.05	Y

Methodology
Controlled PTE (tons/yr) = (Uncontrolled PTE (tons/yr) * (1-Capture))+ (Uncontrolled PTE (tons/yr)*Capture * (1-Control)
* Baghouse only controls metal portion of HAPs

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Part 70 Significant Source and Significant Permit Modification

Source Description and Location

Source Name:	General Motors LLC
Source Location:	105 GM Drive, Bedford, IN 47421
County:	Lawrence
SIC Code:	3363 and 3365
Operation Permit No.:	093-26058-00007
Operation Permit Issuance Date:	May 22, 2009
Significant Source Modification No.:	093-29425-00007
Significant Permit Modification No.:	093-29428-00007
Permit Reviewer:	Jillian Bertram

Existing Approvals

The source was issued Part 70 Operating Permit No. 093-26058-00007 on May 22, 2009. The source has since received the following approvals:

(a) Administrative Amendment No. 093-28250-00007, issued on July 28, 2009;
(b) Administrative Amendment No. 093-28273-00007, issued on August 3, 2009; and
(c) Administrative Amendment No. 093-28615-00007, issued on November 4, 2009.

County Attainment Status

The source is located in Lawrence County.

Pollutant	Designation
SO_2	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O_3	Unclassifiable or attainment effective June 15, 2004, 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. Lawrence 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) $PM_{2.5}$
Lawrence 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
Lawrence County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Fugitive Emissions

Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7, and there is no applicable New Source Performance Standard that was in effect on August 7, 1980, fugitive emissions are not counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

Source Status

The table below summarizes the potential to emit of the entire source, prior to the proposed modification, after consideration of all enforceable limits established in the effective permits:

Pollutant	**Emissions** (ton/yr)
PM	231.65
PM_{10}	231.65
SO_2	0.91
VOC	95.31
CO	127.02
NO_X	151.21
Hexane	2.86
Total HAPs	13.72

(a) This existing source is not a major stationary source, under PSD (326 IAC 2-2), because no regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1).

(b) These emissions are based upon T093-26058-00007.

(c) This existing source is not a major source of HAPs, as defined in 40 CFR 63.2, because HAPs emissions are limited 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, this source is an area source under Section 112 of the Clean Air Act (CAA).

Description of Proposed Modification

The Office of Air Quality (OAQ) has reviewed a modification application, submitted by General Motors, LLC on July 2, 2010, relating to the installation of a Semi-Permanent Molding process at the source. The following is a list of the new and removed emission units and pollution control devices.

New Units:

SPM Melting Operations

(a) Three (3) natural gas-fired stack melting furnaces, identified as Line 1 Stack Melter, Line 2 Stack Melter, and Line 3 Stack Melter, approved for construction in 2010, each with a nominal capacity of five (5) tons of metal per hour, 0.1955 pounds of inorganic flux per ton of metal, and 0.1019 pounds of organic flux per ton of metal, and each with a heat input capacity of 11.1 MMBtu/hr with emissions from each controlled by a baghouse.

Semi-Permanent Mold (SPM) Lines

(b) Three (3) Semi-Permanent Mold (SPM) Lines consisting of pouring, cooling, and extraction, identified as SPM Line 1, SPM Line 2, and SPM Line 3, approved for construction in 2010, each with a nominal capacity of 60 molds per hour using 1.6 tons of molten aluminum and 2 tons of core sand per hour, with emissions from each controlled by a baghouse.

(c) Three (3) finishing lines consisting of milling, hammer and vibratory decore, pin gauge and saw riser, robotic defin, and manual defin, identified as Finishing Lines 1-3, approved for construction in 2010, with a nominal capacity of 4815 pounds per hour, each with emissions controlled by a baghouse.

Core Room Operations

(d) Three (3) core sand silos with sand handling equipment, identified collectively as Sand Handling, approved for construction in 2010, each with a capacity of 60 tons per hour, with emissions from all controlled by a baghouse.

(e) Two (2) core sand mixers, identified as Sand Mix 1 and Sand Mix 2, approved for construction in 2010, with a total nominal capacity of 22.5 tons per hour,, with one unit operating and one unit as a backup, with emissions from each controlled by baghouse.

(f) Five (5) epoxy acrylic core machines, identified as Core Make 1 through 5, approved for construction in 2010, each with a nominal capacity of 2.64 tons of cores per hour with 1.3% resin content, each using approximately 16 pounds per ton of sulfur dioxide catalyst, with four operating and one unit as a backup, with emissions from all controlled by a caustic scrubber.

(g) One (1) natural gas-fired thermal sand reclamation system, identified as Sand Reclaim, with a nominal capacity of 6.0 tons of sand per hour and a maximum heat input of 6.0 MMBtu/hr, with emissions controlled by a baghouse.

(h) Natural gas-fired combustion sources with heat input equal to or less than ten (10) MMBtu/hr including but not limited to the following:

Three (3) production back-up mold preheat burners
Two (2) Line 1 mold coat touch up area burners
Two (2) Line 2 mold coat touch up area burners
Two (2) Line 3 mold coat touch up area burners
Six (6) Line 1 mold line carousel burners
Six (6) Line 2 mold line carousel burners
Six (6) Line 3 mold line carousel burners
Six (6) mold preparation area burners, including mold preheat, mold coating, and mold decoating
Two (2) solution heat treat furnaces
Two (2) aging furnaces

(i) Pre-machining operations controlled by a mist collector.

Units being removed:

Piston Melting

(a) One (1) natural gas-fired dry hearth furnace, identified as Number 13, with a maximum heat input capacity of 10 million British thermal units per hour, and a maximum capacity of 2.08 tons of aluminum per hour, and one (1) pound of inorganic flux per ton of metal, with emissions uncontrolled, constructed in 2002, and exhausting to stack DH-13-1.

(b) One (1) natural gas-fired dry hearth furnace, identified as Number 14, with a maximum heat input capacity of 10 million British thermal units per hour and a maximum capacity of 2.08 tons of aluminum per hour, and one (1) pound of inorganic flux per ton of metal, with emissions uncontrolled, constructed in 2003, and exhausting to stack DH-14-1.

(c) One (1) natural gas-fired reverberatory furnace, identified as Number 18A, with a maximum heat input capacity of 7 million British thermal units per hour, and a maximum capacity of 2.0 tons of aluminum per hour, nine (9) pounds of inorganic flux per ton of metal, and two (2) pounds of organic flux per ton of metal, with emissions uncontrolled, constructed in 2003, and exhausting to stacks 261 and 264.

(d) One (1) natural gas-fired reverberatory melting furnace, identified as RF-5 and as PIST MELT - #5, with a maximum capacity of 4.17 tons of metal per hour, 9 pounds of inorganic flux per ton of metal, 2 pounds of organic flux per ton of metal, and a maximum heat input capacity of 25 million Btu per hour, with emissions uncontrolled, constructed in 1977, and exhausting to stacks 283 and 284.

(e) One (1) natural gas-fired dry hearth melter, identified as DH No. 6, with a maximum capacity of 5.0 tons of metal per hour, and 0.1 pounds of inorganic flux per ton of metal, and with a maximum heat capacity of 25 million Btu per hour, with emissions uncontrolled, constructed in 1999, and exhausting to stacks 6-1 and 6-2.

(f) One (1) natural gas-fired reverberatory holding furnace, identified as RF No. 6, with a maximum capacity of 5.0 tons of metal per hour, and 0.1 pounds of inorganic flux per ton of metal, and with a maximum heat capacity of 8 million Btu per hour, with emissions uncontrolled, constructed in 1999, and exhausting to stacks 6-3 and 6-4.

(g) One (1) natural gas-fired reverberatory melting furnace, referred to as RF-19 and as PIST MELT - #19, with a maximum capacity of 4.67 tons of metal per hour, 9 pounds of inorganic flux per ton of metal, 2 pounds of organic flux per ton of metal, and a maximum heat input capacity of 28 million Btu per hour, with emissions uncontrolled, constructed in 1978, and exhausting to stacks 287 and 288.

Enforcement Issues

There are no pending enforcement actions related to this modification.

Emission Calculations

See Appendix A of this Technical Support Document for detailed emission calculations.

Permit Level Determination – Part 70

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emission unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant,

including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, IDEM, or the appropriate local air pollution control agency."

The following table is used to determine the appropriate permit level under 326 IAC 2-7-10.5. This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

PTE Before Controls of the Modification	
Pollutant	**Potential To Emit** (ton/yr)
PM	334.03
PM_{10}	163.90
SO_2	928.94
VOC	117.07
CO	48.54
NO_X	45.03
Single HAPs	<10
Total HAPs	< 25

This source modification is subject to 326 IAC 2-7-10.5(f)(4) because the potential to emit of PM, PM10, SO2, VOC, CO, and NOx from the modification is greater than 25 tons per year. Additionally, the modification will be incorporated into the Part 70 Operating Permit through a significant permit modification issued pursuant to 326 IAC 2-7-12(d) because it involves case-by-case determinations of emission limitations and standards.

Permit Level Determination – PSD

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

	Potential to Emit (ton/yr)					
Process / Emission Unit	**PM**	**PM_{10}**	**SO_2**	**NOx**	**VOC**	**CO**
Chip Dryer Process	45.50	45.50	0.00	0.00	66.58	0.00
Chip Dryer Combustion	0.06	0.06	0.02	2.99	0.16	2.51
All furnaces	155.75	155.75	0.67	112.53	6.19	94.52
SPM Line 1	9.39	5.47	1.21	0.00	24.53	3.57
SPM Line 2	9.39	5.47	1.21	0.00	24.53	3.57
SPM Line 3	9.39	5.47	1.21	0.00	24.53	3.57
Core Make 1	0.00	0.00	111.45	0.00	6.28	0.00
Core Make 2	0.00	0.00		0.00	6.28	0.00
Core Make 3	0.00	0.00		0.00	6.28	0.00
Core Make 4	0.00	0.00		0.00	6.28	0.00
Core Make 5	0.00	0.00		0.00	6.28	0.00
Sand Mix 1	5.57	14.05	0.00	0.00	0.00	0.00
Sand Mix 2						
Sand Handling						
Sand Reclaim	10.00	14.39	0.02	2.63	24.90	2.21
Solution HT Furnace 1	0.02	0.10	0.01	1.31	0.07	1.10
Solution Ht Furnace 2	0.02	0.10	0.01	1.31	0.07	1.10
Aging HT Furnace 1	0.02	0.07	0.01	0.88	0.05	0.74
Aging HT Furnace 2	0.02	0.07	0.01	0.88	0.05	0.74
Misc. Combustion	0.45	1.78	0.14	23.43	1.29	19.68
Coating	0.00	0.00	0.00	0.00	1.71	0.00
Total Source-Wide Limits	245.65	248.27	115.94	145.96	188.93	133.32
PSD Major Source Threshold	250	250	250	250	250	250

This modification to an existing minor stationary source is not major because the source-wide emissions of all regulated pollutants are still limited to less than the PSD major source threshold levels.

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable to the entire source, the source shall comply with the following:

New Limits:

(a) The SO_2 emissions from the core machines (Core Make 1 through 5) shall not exceed 4.35 pounds per ton of core.

(b) The PM emissions from the sand mixing and handling operations (Sand Mix 1, Sand Mix 2, and Sand Handling) shall not exceed 0.21 pounds per ton of sand.

(c) The PM emissions from the sand reclamation operations (Sand Reclaim) shall not exceed 0.38 pounds per ton of sand.

(d) The VOC emission from the sand reclamation operations (Sand Reclaim) shall not exceed 0.94 pounds per ton of sand.

(e) Metal throughput to the thermal chip dryers (CHIP-2) shall not exceed 66576 tons per twelve (12) month consecutive period.

(f) Sand throughput to the sand mixing and handling operation (Sand Mix 1, Sand Mix 2, and Sand Handling) shall not exceed 52560 tons of sand per twelve(12) month consecutive period.

(g) Core throughput to the core make machines (Core Make 1 through 5) shall not exceed 52560 tons per twelve (12) month consecutive period.

(h) The sand throughput to the sand reclamation operation (Sand Reclaim) shall not exceed 52560 tons per twelve (12) month consecutive period.

Modified Limits:

(a) The PM emissions from the thermal chip dryer (CHIP-2) shall not exceed 1.37 pounds per ton of metal.

(b) The PM_{10} emissions from the thermal chip dryer (CHIP-2) shall not exceed 1.37 pounds per ton of aluminum chips.

(c) The Permittee shall melt only clean charge, internal scrap, or customer returns in any of the furnaces at this source.

Existing Limits:

(a) The VOC emissions from the thermal chip dryer (CHIP-2) shall not exceed 2.0 pounds per ton of aluminum chips.

(b) The total amount of metal melted by all the furnaces combined shall not exceed 175,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

(c) The PM emissions from each of the furnaces, other than furnace DC No. 9, shall not exceed 1.78 pounds per ton of metal melted averaged over the melt cycle.

(d) The PM_{10} emissions from each of the furnaces, other than furnace DC No. 9, shall not exceed 1.78 pounds per ton of metal melted averaged over the melt cycle.

(e) The PM emissions from furnace DC No. 9 shall not exceed 1.28 pounds per ton of metal melted averaged over the melt cycle.

(f) The PM_{10} missions from furnace DC No. 9 shall not exceed 1.28 pounds per ton of metal melted averaged over the melt cycle.

(g) The amount of organic flux used in all of the furnaces combined shall not exceed 34,909 pounds per twelve (12) consecutive month period with compliance determined at the end of each month, where 100 pounds of inorganic flux is equivalent to 1 pound of organic flux.

(h) The HCl emissions from the use of organic flux shall not exceed 0.55 pounds per pound of organic flux used.

(i) The HF emissions from the use of organic flux shall not exceed 0.06 pounds per pound of organic flux used.

(j) The hexachloroethane emissions from the use of organic flux shall not exceed 0.004 pounds per pound of organic flux used.

(k) The HCl emissions from the use of inorganic flux shall not exceed 0.005 pounds per pound of inorganic flux used.

(l) The HF emissions from the use of inorganic flux shall not exceed 0.03 pounds per pound of inorganic flux used.

Compliance with these limits shall limit the source-wide total potential to emit of PM, PM_{10}, SO_2, and VOC to less than 250 tons per 12 consecutive month period, each and shall render 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable to the entire source.

Compliance with the above limit combined with the PTE of other emission unit, shall limit emissions of any single HAP from the entire source to less than ten (10) tons per twelve (12) month consecutive period and emissions of total HAPs to less than 25 tons per twleve (12) month consecutive period of total HAPs and make the entire source an area source for HAPs.

Federal Rule Applicability Determination

NSPS:

(a) The emergency generator and fire pump are not subject to the requirements of the New Source Performance Standard for Stationary Compression Ignition Internal Combustion Engines, 40 CFR 60.420, Subpart IIII, because both units were constructed before July 11, 2005.

(b) The sand reclaimation operation, Sand Reclaim, is subject to the Standards of Performance for Calciners and Dryers in Mineral Processing Industries (40 CFR 60.73, Subpart UUU).

The sand reclaimation operation is subject to the following portions of Subpart UUU:

(a) 40 CFR 60.730(a)
(b) 40 CFR 60.730(c)
(c) 40 CFR 60.731
(d) 40 CFR 60.732
(e) 40 CFR 60.735(a)
(f) 40 CFR 60.735(c)(1), (2)
(g) 40 CFR 60.735(d)
(h) 40 CFR 60.736(a), (b)
(i) 40 CFR 60.737

(c) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) included in this proposed modification.

NESHAP:

(d) This source is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Halogenated Solvent Cleaning, Subpart T because the source does not use any of the solvents specifically listed in 40 CFR 63.460(a).

(e) This area source is an aluminum die casting facility and an aluminum foundy, and therefore is subject to the requirements of the National Emissions Standards for Hazardous Air Pollitants for Secondary Aluminum Production (40 CFR 63.150, Subpart RRR) because it operates a thermal chip dryer. No furnace is subject to the requirements of this subpart because the furnaces only melt clean charge, internal scrap, and customer returns.

The chip dryer is subject to the following portions of Subpart RRR:

(1) 40 CFR 63.1500(a), (c)(1), (f);
(2) 40CFR 63.1503;
(3) 40 CFR 63.1505(a)(1),(c),(d),(f);
(4) 40 CFR 63.1506(a)(1),(c),(d), and (f); (Comment: (a)(2) and (b) do not apply)
(5) 40 CFR 63.1510(a),(b),(d),(e),(g) and (k);
(6) 40 CFR 63.1511(a), (b) and (c) ; (Comment: Monitoring and operating parameter values already established)
(7) 40 CFR 63.1512(b),(k),(m);
(8) 40 CFR 63.1516(a),(b), and (c); and
(9) 40 CFR 63.1517(a),(b)(2),(b)(6),(b)(7),(b)(9),(b)(14),(b)(15),(b)(16); and
(10) 40 CFR 63 1518.

(f) On March 3, 2013, the emergency generator and fire pump will be subject to the National Emission Standards for National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (40 CFR 63.658, Subpart ZZZZ).

The emergency generator and fire pump will be subject to the following portions of Subpart ZZZZ:

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

(g) The coating operation is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs): Paint Stripping and Miscellaneous Surface Coating at Area Sources, Subpart HHHHHH because the coatings used do not contain chromium (Cr), lead (Pb), manganese (Mn), nickel (Ni), or cadmium (Cd), collectively referred to as the target HAP.

(h) This source is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Nine Metal Fabrication and Finishing Sources, Subpart XXXXXX because the SIC codes (3363, 3365) are not included in EPA's list of affected facilities.

(i) This source is subject to the National Emission Standards for Hazardous Air Pollutants for Area Source Standards for Aluminum, Copper, and other Non-ferrous Foundries (40 CFR 63.1154, Subpart ZZZZZZ.

This source is subject to the following portions of Subpart ZZZZZZ:

(1) 40 CFR 63.11544(a)(1)
(2) 40 CFR 63.11544(a)(4)(i)
(3) 40 CFR 63.11544(b)
(4) 40 CFR 63.11544(c)
(5) 40 CFR 63.11545(a)
(6) 40 CFR 63.11550(a)
(7) 40 CFR 63.11552(a)
(8) 40 CFR 63.11553(a)
(9) 40 CFR 63.11553(b)
(10) 40 CFR 63.11553(c)(1)
(11) 40 CFR 63.11553(c)(2)
(12) 40 CFR 63.11553(c)(3)
(13) 40 CFR 63.11553(d)
(14) 40 CFR 63.11553(e)
(15) 40 CFR 63.11555
(16) 40 CFR 63.11556
(17) 40 CFR 63.11557

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

(d) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to new or modified emission units that involve a pollutant-specific emission unit and meet the following criteria:

(1) has a potential to emit before controls equal to or greater than the Part 70 major source threshold for the pollutant involved;

(2) is subject to an emission limitation or standard for that pollutant; and

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

The following table is used to identify the applicability of each of the criteria, under 40 CFR 64.1, to each new or modified emission unit involved:

CAM Applicability Analysis								
Emission Unit	**Pollutant**	**Control Device Used**	**Emission Limitation** (Y/N)	**Uncontrolled PTE** (ton/yr)	**Controlled PTE** (ton/yr)	**Part 70 Major Source Threshold** (ton/yr)	**CAM Applicable** (Y/N)	**Large Unit** (Y/N)
SPM Line 1	PM	Baghouse	N	-	-	-	N	-
SPM Line 1	PM10	Baghouse	N	-	-	-	N	-
SPM Line 2	PM	Baghouse	N	-	-	-	N	-
SPM Line 2	PM10	Baghouse	N	-	-	-	N	-
SPM Line 3	PM	Baghouse	N	-	-	-	N	-
SPM Line 3	PM10	Baghouse	N	-	-	-	N	-
Core Make 1	SO2	Scrubber	Y	84.10	2.51	100	Y	N
Core Make 2	SO2	Scrubber	Y	84.10	2.51	100	Y	N
Core Make 3	SO2	Scrubber	Y	84.10	2.51	100	Y	N

CAM Applicability Analysis								
Emission Unit	**Pollutant**	**Control Device Used**	**Emission Limitation** (Y/N)	**Uncontrolled PTE** (ton/yr)	**Controlled PTE** (ton/yr)	**Part 70 Major Source Threshold** (ton/yr)	**CAM Applicable** (Y/N)	**Large Unit** (Y/N)
Core Make 4	SO2	Scrubber	Y	84.10	2.51	100	Y	N
Core Make 5	SO2	Scrubber	Y	84.10	2.51	100	Y	N
Sand Mixing and Handling	PM	Baghouse	Y	93.66	1.86	100	N	-
Sand Mixing and Handling	PM10	Baghouse	Y	14.05	0.28	100	N	-
Sand Reclaim	PM	Baghouse	Y	94.66	0.95	100	N	-
Sand Reclaim	PM10	Baghouse	Y	14.39	0.14	100	N	-

Note: All other emissions from the source are uncontrolled

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are not applicable to any of the new emission units.

State Rule Applicability Determination

The following state rules are applicable to the source due to the modification:

326 IAC 2-2 (PSD)
PSD applicability is discussed under the Permit Level Determination – PSD section. The source has elected to limit their operation in such a way to restrict all regulated pollutants to less than the major source thresholds in order to render 326 IAC 2-2 not applicable to the entire source.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The emissions from this source are limited to less than ten (10) tons per year for a single HAP and less than twenty-five (25) tons per year for a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 2-6 (Emission Reporting)
Since this source is required to have an operating permit under 326 IAC 2-7, Part 70 Permit Program, this source is subject to 326 IAC 2-6 (Emission Reporting). In accordance with the compliance schedule in 326 IAC 2-6-3, an emission statement must be submitted triennially. The first report is due no later than July 1, 2006, and subsequent reports are due every three (3) years thereafter. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

<u>Line 1 Stack Melter</u>

(a) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from Line 1 Stack Melter shall not exceed 12.05 pounds per hour when operating at a process weight rate of 5 tons per hour. The pound per hour limitation was calculated with the following 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

Operation of the baghouse is not required to comply with this limit.

Line 2 Stack Melter

(b) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from Line 2 Stack Melter shall not exceed 12.05 pounds per hour when operating at a process weight rate of 5 tons per hour. The pound per hour limitation was calculated with the following 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

Operation of the baghouse is not required to comply with this limit.

Line 3 Stack Melter

(c) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from Line 3 Stack Melter shall not exceed 12.05 pounds per hour when operating at a process weight rate of 5 tons per hour. The pound per hour limitation was calculated with the following 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

Operation of the baghouse is not required to comply with this limit.

SPM Line 1

(d) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from SPM Line 1 shall not exceed 5.61 pounds per hour when operating at a process weight rate of 1.6 tons per hour. The pound per hour limitation was calculated with the following 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

Operation of the baghouse is not required to comply with this limit.

(e) 326 IAC 8-1-6 (General VOC Reduction Requirements)
The requirements of 326 IAC 8-1-6 do not apply to SPM Line 1 because the potential to emit VOC is less than 25 tons per year.

SPM Line 2

(f) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from SPM Line 2 shall not exceed 5.61 pounds per hour when operating at a process weight rate of 1.6 tons per hour. The pound per hour limitation was calculated with the following 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

Operation of the baghouse is not required to comply with this limit.

(g) 326 IAC 8-1-6 (General VOC Reduction Requirements)
The requirements of 326 IAC 8-1-6 do not apply to SPM Line 2 because the potential to emit VOC is less than 25 tons per year.

SPM Line 3

(h) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from SPM Line 3 shall not exceed 5.61 pounds per hour when operating at a process weight rate of 1.6 tons per hour. The pound per hour limitation was calculated with the following 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

Operation of the baghouse is not required to comply with this limit.

(i) 326 IAC 8-1-6 (General VOC Reduction Requirements)
The requirements of 326 IAC 8-1-6 do not apply to SPM Line 3 because the potential to emit VOC is less than 25 tons per year.

Core Make 1

(j) 326 IAC 2-7 (Sulfur Dioxide Rules)
The requirements of 326 IAC 2-7 do not apply to Core Make 1 because this is not a combustion unit.

Core Make 2

(k) 326 IAC 2-7 (Sulfur Dioxide Rules)
The requirements of 326 IAC 2-7 do not apply to Core Make 2 because this is not a combustion unit.

Core Make 3

(l) 326 IAC 2-7 (Sulfur Dioxide Rules)
The requirements of 326 IAC 2-7 do not apply to Core Make 3 because this is not a combustion unit.

Core Make 4

(m) 326 IAC 2-7 (Sulfur Dioxide Rules)
The requirements of 326 IAC 2-7 do not apply to Core Make 4 because this is not a combustion unit.

Core Make 5

(n) 326 IAC 2-7 (Sulfur Dioxide Rules)
The requirements of 326 IAC 2-7 do not apply to Core Make 5 because this is not a combustion unit.

Sand Mix 1, Sand Mix 2, and Sand Handling

(o) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the sand mixing and handling operation shall not exceed 13.53 pounds per hour when operating at a process weight rate of 5.94 tons per hour. The pound per hour limitation was calculated with the following 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 baghouse shall be in operation at all times the sand mixing and handling operation is in operation, in order to comply with this limit.

Sand Reclaim

(p) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the sand reclamation operation shall not exceed 8.56 pounds per hour when operating at a process weight rate 3 tons per hour. The pound per hour limitation was calculated with the following 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 baghouse shall be in operation at all times the sand reclamation operation is in operation, in order to comply with this limit.

(q) 326 IAC 8-1-6 (General VOC Reduction Requirements)
The requirements of 326 IAC 8-1-6 do not apply to the sand reclamation system because VOC emissions are limited to less than 25 tons per year.

Miscellaneous Combustion

(r) 326 IAC 8 (Nitrogen Oxides Control in Clark and Floyd Counties)
326 IAC 8 does not apply to the miscellaneous combustion sources because the source is located in Lawrence County.

Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions; however, these provisions do not always fulfill the requirement for a continuous demonstration. When this occurs, IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, Compliance Determination Requirements are included in the permit. The Compliance Determination Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

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

The Compliance Determination Requirements applicable to this modification are as follows:

(a) To demonstrate compliance with 326 IAC 2-2 avoidance limits, Core Make 1 through 5 have applicable compliance determination conditions as specified below:

(1) The caustic scrubber shall be in operation and controlling emissions from the core making process at all times when any of the core making machines (Core Make 1 through 5) are in operation.

(b) To demonstrate compliance with 326 IAC 6-3-2 and 326 IAC 2-2 avoidance limits, Sand Mix 1, Sand Mix 2, and Sand Handling have applicable compliance determination conditions as specified below:

(1) The baghouse associated with the sand mixing and handling operation shall be in operation and controlling emissions from the sand mixing and handling operations at all times the sand mixing and handling operation is in operation.

(c) To document compliance with 326 IAC 2-2 avoidance limits, Sand Reclaim has applicable compliance determination conditions as specified below:

(2) The baghouse associated with the sand reclamation operation shall be in operation and controlling emissions from the sand mixing and handling operations at all times the sand reclamation operation is in operation.

Summary of Testing Requirements						
Emission Unit	**Control Device**	**Timeframe for Testing**	**Pollutant**	**Frequency of Testing**	**Limit or Requirement**	**Underlying Rule**
Core Make 1 through 5	Scrubber	180 days after start-up	SO2	5 years	4.35 lb/ton of core	326 IAC 2-2
Sand mixing and handling	Baghouse	180 days after start-up	PM	5 years	0.38 lb/ton of sand	326 IAC 2-2 326 IAC 6-3-2
Sand Reclamation	Baghouse	180 days after start-up	PM	5 years	0.38 lb/ton of sand	326 IAC 2-2
Sand Reclamation		180 days after start-up	VOC	5 years	0.95 lb/ton of sand	326 IAC 2-2 326 IAC 8-1-6

The compliance monitoring requirements applicable to this modification are as follows:

Emission Unit/Control	Operating Parameters	Frequency	Underlying Rule
Core Make 1 through 5 - Scrubber	Flow rate	Once per day	326 IAC 2-2
Core Make 1 through 5 - Scrubber	pH	Once per day	326 IAC 2-2
Core Make 1 through 5 - Scrubber	Failure Detection	As Needed	326 IAC 2-2
Sand mixing and handling – Baghouse	VE	Once per day	326 IAC 2-2 326 IAC 6-3-2
Sand mixing and handling – Baghouse	Pressure Drop	Once per day	326 IAC 2-2 326 IAC 6-3-2
Sand mixing and handling – Baghouse	Broken or Failed Detection	As Needed	326 IAC 2-2 326 IAC 6-3-2
Sand reclamation – Baghouse	VE	Once per day	326 IAC 2-2
Sand reclamation – Baghouse	Pressure Drop	Once per day	326 IAC 2-2
Sand reclamation - Baghouse	Broken or Failed Detection	As Needed	326 IAC 2-2

Proposed Changes

The changes listed below have been made to Part 70 Operating Permit No. 093-26058-00007. Deleted language appears as ~~strikethroughs~~ and new language appears in **bold**:

Modifications No. 1 and 2

Piston Melting Operations have been removed from the permit along with all accompanying conditions.

New melting operations units have been added to the permit as well as all applicable rules and compliance conditions.

PM2.5 limits have also been removed from the permit since this source is located in an attainment county for PM2.5.

Condition D.2.1 has been broken up into two conditions, one for PSD limits and one for HAP limits.

***

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

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

SPM Melting Operations (

(n) Three (3) natural gas-fired stack melting furnaces, identified as Line 1 Stack Melter, Line 2 Stack Melter, and Line 3 Stack Melter, approved for construction in 2010, each with a nominal capacity of five (5) tons of metal per hour, 0.1955 pounds of inorganic flux per ton of metal, and 0.1019 pounds of organic flux per ton of metal, and each with a heat input capacity of 11.1 MMBtu/hr with emissions from each controlled by a baghouse.

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SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

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SPM Melting Operations

(n) Three (3) natural gas-fired stack melting furnaces, identified as Line 1 Stack Melter, Line 2 Stack Melter, and Line 3 Stack Melter, approved for construction in 2010, each with a nominal capacity of five (5) tons of metal per hour, 0.1955 pounds of inorganic flux per ton of metal, and 0.1019 pounds of organic flux per ton of metal, and each with a heat input capacity of 11.1 MMBtu/hr with emissions from each controlled by a baghouse.

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

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

D.2.1 PSD Minor Limit [326 IAC 2-2] ~~and HAPs Area Source Limit~~

~~Pursuant to SSM 093-13639-00007, issued June 16, 2002, and SSM 093-23139-00007, the source shall comply with conditions (a), (b), (c), (d), and (k) in~~ **In** order to render the requirements of 326 IAC 2-2 (PSD) not applicable ~~to the dry hearth furnaces #9,10, 13, and 14 and reverberatory furnace #18A, and in order for the source to maintain minor PSD status. Pursuant to SSM 093-13639-00007, issued June 16, 2002, revised by this Part 70 permit,~~ **the Permittee shall comply with the following limits**: ~~with conditions (a), (e) through (j), in order to limit the potential to emit of any single HAP to less than 10 tons per year and any combination of HAPs to less than 25 tons per year, will make this source an area source of HAPs~~.

(a) The total amount of metal melted by all the furnaces combined shall not exceed 175,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

(b) The PM emissions from each of the furnaces, other than furnace DC No. 9, shall not

exceed 1.78 pounds per ton of metal melted averaged over the melt cycle.

(c) The PM10 emissions from each of the furnaces, other than furnace DC No. 9, shall not exceed 1.78 pounds per ton of metal melted averaged over the melt cycle.

(d) The PM/~~PM10~~ emissions from furnace DC No. 9 shall not exceed 1.28 pounds per ton of metal melted averaged over the melt cycle.

(e) The PM10 emissions from furnace DC No. 9 shall not exceed 1.28 pounds per ton of metal melted averaged over the melt cycle.

~~(e) The amount of organic flux used in all of the furnaces combined shall not exceed 34,909 pounds per twelve (12) consecutive month period with compliance determined at the end of each month, where 100 pounds of inorganic flux is equivalent to 1 pound of organic flux.~~

~~(f) The HCl emissions from the use of organic flux shall not exceed 0.55 pounds per pound of organic flux used.~~

~~(g) The HF emissions from the use of organic flux shall not exceed 0.06 pounds per pound of organic flux used.~~

~~(h) The hexachloroethane emissions from the use of organic flux shall not exceed 0.004 pounds per pound of organic flux used.~~

~~(i) The HCl emissions from the use of inorganic flux shall not exceed 0.005 pounds per pound of inorganic flux used.~~

~~(j) The HF emissions from the use of inorganic flux shall not exceed 0.03 pounds per pound of inorganic flux used.~~

~~(k) The Permittee shall not melt any post-consumer scrap materials in any of the furnaces at this source. Only General Motors returns and/or returns from non-General Motors sources where the composition of the purchased returns have at least the same quality as the General Motors returns shall be melted in any of the furnaces. The non-General Motors returns shall be specified contractually, and the quality of the returns shall be controlled contractually. Therefore, this source is not considered a secondary metal production facility and is therefore, not one of the 28 listed source categories.~~

~~These limits are necessary in order that the source maintain minor PSD status; therefore, the requirements of 326 IAC 2-2 (PSD) will not apply to units constructed after 1977. These conditions are also sufficient to limit emissions of HAPs to less than 10 tons per year for any single HAP and less than 25 tons per year for all HAPs combined.~~

Compliance with the above limit combined with Conditions D.2.1, D.4.1, D.5.1, D.7.1, and the PTE of other emission unit, shall limit PM from the entire source to less than 250 tons per twelve (12) month consecutive period and render 326 IAC 2-2 not applicable to the units constructed after 1977.

D.2.2 HAP Area Source Limits

In order to render the requirements of 326 IAC 2-4.1 not applicable, the Permittee shall comply with the following limits:

(a) The amount of organic flux used in all of the furnaces combined shall not exceed 34,909 pounds per twelve (12) consecutive month period with compliance determined at the end of each month, where 100 pounds of inorganic flux is equivalent to 1 pound of organic flux.

(b) The HCl emissions from the use of organic flux shall not exceed 0.55 pounds per pound of organic flux used.

(c) The HF emissions from the use of organic flux shall not exceed 0.06 pounds per pound of organic flux used.

(d) The hexachloroethane emissions from the use of organic flux shall not exceed 0.004 pounds per pound of organic flux used.

(e) The HCl emissions from the use of inorganic flux shall not exceed 0.005 pounds per pound of inorganic flux used.

(f) The HF emissions from the use of inorganic flux shall not exceed 0.03 pounds per pound of inorganic flux used.

(g) The Permittee shall melt only clean charge, internal scrap, or customer returns any post-consumer scrap materials in any of the furnaces at this source.

Compliance with the above limit combined with the PTE of other emission unit, shall limit emissions of any single HAP from the entire source to less than ten (10) tons per twelve (12) month consecutive period and emissions of total HAPs to less than 25 tons per twleve (12) month consecutive period of total HAPs and make the entire source an area source for HAPs.

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~~D.2.2~~**D.2.3** Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the following units shall be limited as follows when operating at the listed process weight rate:

Unit	Process Weight Rate (ton/hr)	PM Emission Limit (lb/hr)
Reverberatory Furnace RF-2 (DC MELT B - #2)	6.25	14
Reverberatory Furnace RF-11 (DC MELT A - #11)	5.1	12.21
Reverberatory Furnace RF-12 (DC MELT A - #12)	10.0	19.18
Dry Hearth Furnace Number 10	12.5	22.27
~~Dry Hearth Furnace Number 13~~	~~2.08~~	~~6.70~~
~~Dry Hearth Furnace Number 14~~	~~2.08~~	~~6.70~~
~~Reverberatory Furnace Number 18A~~	~~2.0~~	~~6.52~~
~~Reverberatory Furnace RF-5 (PIST MELT - #5)~~	~~4.17~~	~~10.67~~
~~Dry Hearth Melter (DH No. 6)~~	~~5.0~~	~~12.05~~
~~Reverberatory Holding Furnace (RF No. 6)~~	~~5.0~~	~~12.05~~
~~Reverberatory Furnace RF-19 (PIST MELT - #19)~~	~~4.67~~	~~11.51~~
Dry Hearth Furnace DC No. 9	22.5	33.0
Line 1 Melter	**5.0**	**12.05**
Line 2 Melter	**5.0**	**12.05**
Line 3 Melter	**5.0**	**12.05**

The pounds per hour limitations were calculated with the following equation:
Interpolation of the data for the process weight rate up to 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

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

D.2.~~5~~**6** Record Keeping Requirements

(a) To document compliance with Condition D.2.1(a), the Permittee shall keep monthly records of the amount of metal melted in all of the furnaces combined.

(b) To document compliance with Condition ~~D.2.1(e)~~ **D.2.2(a),** the Permittee shall keep monthly records of the amount of organic flux used in all of the furnaces combined.

(c) To document compliance with Condition ~~D.2.1(e)~~ **D.2.2(a),** the Permittee shall keep monthly records of the amount of inorganic flux used in all of the furnaces combined.

(d) To document compliance with Condition ~~D.2.1(k)~~ **D.2.2(g),** the Permittee shall keep records of the type of scrap used in the furnaces. The records shall be sufficient to demonstrate compliance with the requirements of ~~D.2.1(k)~~ **D.2.2(g),**.

(f) All records shall be maintained. Section C- General Record Keeping Requirements contains the Permittee;s obligation with regard to record keeping.

***

D.2.6 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.2.1(a) and ~~D.2.1(e)~~ **D.2.2(a)** shall be submitted to the address in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a ”responsible official” as defined by 326 IAC 2-7-1(34).

Modification No. 3

Three Semi-Permanent Mold Lines have been added to the permit along with applicable rules and compliance conditions.

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

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

***

Semi-Permanent Mold (SPM)

(o) Three (3) Semi-Permanent Mold (SPM) Lines consisting of pouring, cooling, and extraction, identified as SPM Line 1, SPM Line 2, and SPM Line 3, approved for construction in 2010, each with a maximum capacity of 60 molds per hour using 1.6 tons of molten aluminum and 2 tons of core sand per hour, with emissions from each controlled by a baghouse.

(p) Three (3) finishing lines consisting of milling, hammer and vibratory decore, pin gauge and saw riser, robotic defin, and manual defin, identified as Finishing Lines 1-3, approved for construction in 2010, with a nominal capacity of 4815 pounds per hour, each with emissions controlled by a baghouse.

***

SECTION D.4 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Semi-Permanent Mold (SPM) Lines

Three (3) Semi-Permanent Mold (SPM) Lines consisting of pouring, cooling, and extraction, identified as SPM Line 1, SPM Line 2, and SPM Line 3, approved for construction in 2010, each with a nominal capacity of 60 molds per hour using 1.6 tons of molten aluminum and 2 tons of core sand per hour, with emissions from each controlled by a baghouse.

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

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

D.4.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the following units shall be limited as follows when operating at the listed process weight rate:

Unit	Process Weight Rate (ton/hr)	PM Emission Limit (lb/hr)
SPM Line 1	1.6	5.61
SPM Line 2	1.6	5.61
SPM Line 3	1.6	5.61

The pounds per hour limitations were calculated with the following equation: Interpolation of the data for the process weight rate up to 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

Modification No. 4
Core room operations have been added to the permit along with applicable rules and compliance conditions.

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

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

***

Core Room Operations (units approved for construction in SSM 093-29425-00007)

(p) Three (3) core sand silos with sand handling equipment, identified collectively as Sand Handling, approved for construction in 2010, each with a capacity of 60 tons per hour, with emissions from all controlled by a baghouse.

(q) Two (2) core sand mixers, identified as Sand Mix 1 and Sand Mix 2, approved for construction in 2010, with a total nominal capacity of 22.5 tons per hour, with one unit operating and one unit as a backup, with emissions from each controlled by baghouse.

(r) Five (5) epoxy acrylic core machines, identified as Core Make 1 through 5, approved for construction in 2010, each with a nominal capacity of 2.64 tons of cores per hour with 1.3% resin content, each using approximately 16 pounds per ton of sulfur dioxide catalyst, with four operating and one unit as a backup, with emissions from all controlled by a caustic scrubber.

(s) One (1) natural gas-fired thermal sand reclamation system, identified as Sand Reclaim, with a maximum capacity of 6.0 tons of sand per house and a maximum heat input of 6.0 MMBtu/hr, with emissions controlled by a baghouse.

***

SECTION D.5 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(a) Three (3) core sand silos with sand handling equipment, identified collectively as Sand Handling, approved for construction in 2010, each with a capacity of 60 tons per hour, with emissions from all controlled by a baghouse.

(b) Two (2) core sand mixers, identified as Sand Mix 1 and Sand Mix 2, approved for construction in 2010, with a total nominal capacity of 22.5 tons per hour, with one unit operating and one unit as a backup, with emissions from each controlled by baghouse.

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

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

D.5.1 PSD Minor Limit [326 IAC 2-2]

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

(a) The PM emissions from the sand mixing and handling operations (Sand Mix 1, Sand Mix 2, and Sand Handling) shall not exceed 0.34 pounds per ton of sand.

(b) Sand throughput to the sand mixing and handling operation (Sand Mix 1, Sand Mix 2, and Sand Handling) shall not exceed 52560 tons of sand per twelve(12) month consecutive period.

Compliance with the above limit combined with Conditions D.1.1, D.2.1, D.4.1, D.7.1, and the PTE of other emiission unit, shall limit PM from the entire source to less than 250 tons per twelve (12) month consecutive period and render 326 IAC 2-2 not applicable to the entire source.

D.5.2 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the following units shall be limited as follows when operating at the listed process weight rate:

Unit	Process Weight Rate (ton/hr)	PM Emission Limit (lb/hr)
Sand Mix 1	5.94	13.53
Sand Mix 2		
Sand Handling		

The pounds per hour limitations were calculated with the following equation: Interpolation of the data for the process weight rate up to 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.5.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan is required for these facilities and its control devices. Section B- Preventive Maintenance Plan contains the Permittee's obligation with regard to Preventive Maintenance Plans.

Compliance Determination Requirements

D.5.4 Control Device Operation [326 IAC 6-3-2] [326 IAC 2-2]

(a) In order to comply with Conditions D.5.1 and D.5.2, the baghouses associated with the sand mixing and handling operation shall be in operation and controlling emissions from the associated sand mixing and handling operations at all times the associated sand mixing and handling operation is in operation.

(b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify 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.

D.5.5 Testing Requirements [326 IAC 2-1.1-11]

In order to demonstrate compliance with Condition D.5.1, the Permittee shall perform PM testing for the baghouses within one hundred and eighty (180) days of start-up of the sand mixing and handling operation. This testing shall be conducted utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Section C - Performance Testing contains the Permittee's obligation with regard to performance testing.

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

D.5.6 Visible Emissions Notations

(a) Daily visible emission notations of the sand mixing and handling stack exhaust shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

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

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

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

(e) The Compliance Response Plan, or its equivalent (e.g., Operation, Maintenance and Monitoring (OM&M)) for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response shall be considered a deviation from this permit. Section C- Compliance Response Plan -Preparation, Implementation, Records, and Reports contains the Permitte's obligation with regard to compliance response plans.

D.5.7 Parametric Monitoring

(a) The Permittee shall record the pressure drop across the sand mixing and handling baghouses at least once per day when the sand mixing and handling operation is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 0.5 to 7.0 inches of water, the Permittee shall take reasonable response steps. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit. Section C- Compliance Response Plan- Preparation, Implementation, Records, and Reports contains the Permitte's obligation with regard to response steps

(b) The instruments used for determining the pressure drop shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be validate at least once per year or as recommended by the manufacturer. The validations shall not be completed in consecutive months.

D.5.8 Broken or Failed Bag Detection

(a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

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

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

D.5.9 Record Keeping Requirements

(a) To document compliance with Condition D.5.1(b) – PSD Minor Limit, the Permittee shall maintain records of the monthly sand throughput to the sand mixing and handling operations.

(b) To document compliance with Condition D.5.6 - Visible Emission Notations, the Permittee shall maintain daily records of the visible emission notations of the sand mixing and handling operation stack exhaust. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of a visible emission notation (e.g. the process did not operate that day).

(c) In order to document compliance with Condition D.5.7 - Parametric Monitoring, the Permittee shall maintain the daily records of the pressure drop across the baghouses controlling the sand mixing and handling operation. 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) All records shall be maintained. Section C- General Record Keeping requirements contains the Permittee's obligation with regard to response steps.

D.5.10 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.5.1(b) shall be submitted to the address in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

Part 70 Quarterly Report

Source Name: General Motors LLC
Source Address: 105 GM Drive, Bedford, Indiana 47421
Part 70 Permit No.: T 093-26058-00007
Facility: sand mixing and handling operation
Parameter: Amount of sand processed
Limit: Less than 52560 tons of metal per twelve (12) consecutive month period with compliance determined at the end of each month.

QUARTER: **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:

Form Completed by: _____
Title / Position: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

***

SECTION D.6 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(units approved for construction in SSM 093-29425-00007)

Five (5) epoxy acrylic core machines, identified as Core Make 1 through 5, approved for construction in 2010, each with a nominal capacity of 2.64 tons of cores per hour with 1.3% resin content, each using approximately 16 pounds per ton of sulfur dioxide catalyst, with four operating and one unit as a backup, with emissions from all controlled by a caustic scrubber.

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

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

D.6.1 PSD Minor Limit [326 IAC 2-2]

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

(a) The SO_2 emissions from the core machines (Core Make 1 through 5) shall not exceed 4.35pounds per ton of core.

(b) Core throughput to the core make machines (Core Make 1 through 5) shall not exceed 52560 tons per twelve (12) month consecutive period.

Compliance with the above limit combined the potential to emit SO2 from all unlimited other emission units at the source shall limit SO2 from the entire source to less than 250 tons per twelve (12) month consecutive period and render 326 IAC 2-2 not applicable to the entire source.

D.6.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan is required for these facilities and their control devices. Section B- Preventive Maintenance Plan contains the Permittee's obligation with regard to Preventive Maintenance Plans.

Compliance Determination Requirements

D.6.3 Control Device Operation [326 IAC 2-2]

In order to comply with Condition D.6.1, the scrubber associated with the core make machines shall be in operation and controlling emissions from the core make machines at all times any of the core make machines is in operation.

D.6.4 Testing Requirements [326 IAC 2-1.1-11]

In order to demonstrate compliance with Condition D.6.1, the Permittee shall perform SO2 testing for the scrubber within one hundred and eighty (180) days of start-up of the core make machines. This testing shall be conducted utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of the last valid compliance demonstration. Section C - Performance Testing contains the Permittee's obligation with regard to performance testing.

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

D.6.5 Parametric Monitoring

(a) Permittee shall monitor the inlet flow rate of the scrubber at least once per day when any of the core make machines is in operation. When for any one reading, the scrubber flow rate is less than 250 gallons per minute, or a value established during the latest stack test, the Permittee shall take reasonable response steps. Section C - Compliance Response Plan contains the Permittee's obligation with regard to response steps. A flow rate that is less than the 250 gallons per minute, or a value established during the latest stack test, is not a deviation from this permit. Failure to take response steps in shall be considered a deviation from this permit.

The instrument used for determining the scrubber inlet liquid flow rate shall be subject to approval by IDEM, OAQ, and shall be validated at least once per year or as recommended by the manufacturer. The validations will not be completed in consecutive months. Section C -Instrument Specifications contains the Permittee's obligation with regard to instrument specifications.

(b) The Permittee shall monitor the pH of the scrubber's outlet liquid flow rate at least once per day when any of the core make machines are in operation. When for any one reading, the pH is less than 9 , the Permittee shall take reasonable response steps. Section C - Compliance Response Plan contains the Permittee's obligation with regard to response steps. A pH that is less than 9, is not a deviation from this permit. Failure to take response steps in shall be considered a deviation from this permit.

The instrument used for determining the scrubber liquid flow pH shall be subject to approval by IDEM, OAQ, and shall be validated at least once per year or as recommended by the manufacturer. The valildations will not be completed in

consecutive months. Section C -Instrument Specifications contains the Permittee's obligation with regard to instrument specifications.

D.6.6 Scrubber Failure Detection

In the event that scrubber failure has been observed, the failed scrubber and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B – Emergency Provisions).

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

D.6.7 Record Keeping Requirements

(a) To document compliance with Condition D.6.1(b) – PSD Minor Limit, the Permittee shall maintain records of the monthly core throughput to the core make machines.

(b) To document compliance with Condition D.6.5(a), the Permittee shall maintain daily records of the scrubber inlet liquid flow rate of the scrubber. The Permittee shall include in its daily record when a scrubber inlet liquid flow rate is not taken and the reason for the lack of a flow rate (e.g. the process did not operate that day).

(c) In order to document compliance with Condition D.6.5(b), the Permittee shall maintain the daily records of the pH of the outlet liquid flow from the scrubber. The Permittee shall include in its daily record when a pH reading is not taken and the reason for the lack of a pH (e.g. the process did not operate that day).

D.6.8 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.6.1(b) shall be submitted to the address in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

Part 70 Quarterly Report

Source Name: General Motors LLC
Source Address: 105 GM Drive, Bedford, Indiana 47421
Part 70 Permit No.: T 093-26058-00007
Facility: Core Make Machines
Parameter: Amount of core processed
Limit: Less than 23126.4 tons of metal per twelve (12) consecutive month period with compliance determined at the end of each month.

QUARTER: **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:

Form Completed by: _____
Title / Position:_____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

***

SECTION D.7 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(units approved for construction in SSM 093-29425-00007)

One (1) natural gas-fired thermal sand reclamation system, identified as Sand Reclaim, with a nominal capacity of 6.0 tons of sand per hour and a maximum heat input of 6.0 MMBtu/hr, with emissions controlled by a baghouse.

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

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

D.7.1 PSD Minor Limit [326 IAC 2-2]

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

(a) The PM emissions from Sand Reclaim shall not exceed 0.38 pounds per ton of sand.

(b) The VOC emissions from Sand Reclaim shall not exceed 2.62 pounds per ton of

sand.

(c) The sand throughput to the sand reclamation operation (Sand Reclaim) shall not exceed 52560 tons per twelve (12) month consecutive period.

Compliance with the above limit combined with Conditions D.2.1, D.4.1, D.5.1, D.7.1, and the PTE of other emiission unit, shall limit PM and VOC from the entire source to less than 250 tons per twelve (12) month consecutive period and render 326 IAC 2-2 not applicable to the entire source.

D.7.2 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the following units shall be limited as follows when operating at the listed process weight rate:

Unit	Process Weight Rate (ton/hr)	PM Emission Limit (lb/hr)
Sand Reclaim	3	8.56

The pounds per hour limitations were calculated with the following equation: Interpolation of the data for the process weight rate up to 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.7.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan is required for these facilities and their control devices. Section B- Preventive Maintenance Plan contains the Permittee's obligation with regard to Preventive Maintenance Plans.

Compliance Determination Requirements

D.7.4 Control Device Operation [326 IAC 6-3-2]

(a) In order to comply with Condition D.7.1, the baghouse associated with the sand reclamation operation shall be in operation and controlling emissions from the sand reclamation operations at all times the sand reclamation operation is in operation.

(b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify 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.

D.7.5 Testing Requirements [326 IAC 2-1.1-11]

(a) In order to demonstrate compliance with Condition D.7.1(a), the Permittee shall perform PM testing for the baghouse within one hundred and eighty (180) days of start-up of the sand reclamation operation. This testing shall be conducted utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Section C - Performance Testing contains the Permittee's obligation with regard to performance testing.

(b) In order to demonstrate compliance with Condition D.7.1(b), the Permittee shall perform VOC testing for the sand reclamation operation (Sand Reclaim) within one hundred eighty (180) days of start-up of the sand reclamation operation. This testing shall be conducted utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Section C - Performance Testing contains the Permittee's obligation with regard to performance testing.

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

D.7.6 Visible Emissions Notations

(a) Daily visible emission notations of the sand reclamation stack exhaust shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

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

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

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

(e) The Compliance Response Plan, or its equivalent (e.g., Operation, Maintenance and Monitoring (OM&M)) for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response shall be considered a deviation from this permit. Section C- Compliance Response Plan -Preparation, Implementation, Records, and Reports contains the Permitte's obligation with regard to compliance response plans.

D.7.7 Parametric Monitoring

(a) The Permittee shall record the pressure drop across the sand reclamation baghouse at least once per day when the sand reclamation operation is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 0.5 to 7.0 inches of water, the Permittee shall take reasonable response steps. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit. Section C- Compliance Response Plan- Preparation, Implementation, Records, and Reports contains the Permitte's obligation with regard to response steps.

(b) The instruments 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 at least once every six (6) months.

D.7.8 Broken or Failed Bag Detection

(a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

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

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

D.7.9 Record Keeping Requirements

(a) To document compliance with Condition D.7.1(c) – PSD Minor Limit, the Permittee shall maintain monthly records of the sand throughput to the sand reclaimation operation.

(b) To document compliance with Condition D.7.6 - Visible Emission Notations, the Permittee shall maintain daily records of the visible emission notations of the sand reclamation operation stack exhaust. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of a visible emission notation (e.g. the process did not operate that day).

(c) In order to document compliance with Condition D.7.7 - Parametric Monitoring, the Permittee shall maintain the daily records of the pressure drop across the baghouse controlling the sand reclamation operation. 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) All records shall be maintained. Section C- General Record Keeping requirements contains the Permittee's obligation with regard to response steps.

D.7.10 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.7.1(c) shall be submitted to the address in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

Part 70 Quarterly Report

Source Name: General Motors LLC
Source Address: 105 GM Drive, Bedford, Indiana 47421
Part 70 Permit No.: T 093-26058-00007
Facility: Sand reclamation operation
Parameter: Amount of sand processed
Limit: Less than 52560 tons of metal per twelve (12) consecutive month period with compliance determined at the end of each month.

QUARTER: **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:

Form Completed by: _____
Title / Position: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

Insignificant combustion units have been added to the permit.

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

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

***

(g) Natural gas-fired combustion sources with heat input equal to or less than ten (10) MMBtu/hr including but not limited to the following:

Three (3) production back-up mold preheat burners
Two (2) Line 1 mold coat touch up area burners
Two (2) Line 2 mold coat touch up area burners
Two (2) Line 3 mold coat touch up area burners
Six (6) Line 1 mold line carousel burners
Six (6) Line 2 mold line carousel burners
Six (6) Line 3 mold line carousel burners
Six (6) mold preparation area burners, including mold preheat, mold coating, and mold decoating
Two (2) solution heat treat furnaces
Two (2) aging furnaces

(g) **Pre-machining operations controlled by a mist collector.**

Modification No. 6
The PSD minor limit for the Chip Dryer has been modified to accommodate for new units. Language in other related conditions has been modified to reflect current model language

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

D.1.1 PSD Minor Limit [326 IAC 2-2]

Pursuant to SSM093-13639-00007, issued June 16, 2002, The Permittee ~~is subject to~~ **shall comply with** ~~t~~he following limitations:

(a) The PM emissions from the thermal chip dryer (CHIP-2) shall not exceed ~~2.28~~ **1.37** pounds per ton of metal.

(b) The PM_{10} emissions from the thermal chip dryer (CHIP-2) shall not exceed ~~2.28~~ **1.37** pounds per ton of aluminum chips.

(c) The VOC emissions from the thermal chip dryer (CHIP-2) shall not exceed 2.0 pounds per ton of aluminum chips.

(d) Metal throughput to the thermal chip dryers (CHIP-2) shall not exceed 66576 tons per twelve (12) month consecutive period with compliance determined at the end of each month.

~~These limits are necessary in order that the source maintain minor PSD status. Therefore, the requirements of 326 IAC 2-2 (PSD) will not apply to units constructed after 1977.~~
Compliance with the above limit combined with Conditions D.2.1, D.4.1, D.5.1, D.7.1, and the PTE of other emission unit, shall limit PM from the entire source to less than 250 tons per twelve (12) month consecutive period and render 326 IAC 2-2 not applicable to the entire source

***

D.1.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

(a) Pursuant to SSM 093-13639-00007, issued June 16, 2002, by ~~April 30, 2013~~ **August 25, 2015**, the Permittee shall perform PM~~, PM_{10},~~ and VOC testing using methods as approved by the Commissioner, in order to demonstrate compliance with Conditions D.1.1 and D.1.2. ~~PM_{10} includes filterable PM_{10} only.~~ These tests shall be repeated at least five (5) years from the date of this valid compliance demonstration. Section C- Performance Testing contains the Permittee's obligation with regard to performance testing.

(b) In order to demonstrate compliance with Condition D.1.1, the Permittee shall perform PM10 testing for the baghouse within 180 days of publication of the new or revised condensable PM10 and PM2.5 test method(s) referenced in the U. S. EPA's Final Rule for Implementation of the New Source Review (NSR) Program for Particulate Matter Less Than 2.5 Micrometers (PM2.5), signed on May 8th, 2008 or within 180 days of issuance of this permit, whichever is later. This testing shall be conducted utilizing methods as approved by the Commissioner. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Section C - Performance Testing contains the Permittee's obligation with regard to performance testing. PM10 includes filterable and condensable PM10.

***

D.1.9 Record Keeping Requirements

(a) To document compliance with Condition D.1.6 - Visible Emission Notations, the Permittee shall maintain daily weekly records of the visible emission notations of the thermal chip dryer (CHIP-2) stack exhaust. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of a visible emission notation, (e.g. the process did not operate that day).

(b) In order to document compliance with condition D.1.7 - Parametric Monitoring, the Permittee shall maintain the daily records of the pressure drop across the baghouse controlling the chip dryer (CHIP-2). The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading, (e.g. the process did not operate that day).

(c) To document compliance with Condition D.1.1(d) – PSD Minor Limit, the permittee shall maintain records of monthly throughput of metal to the thermal chip dryer.

(d) All records shall be maintained. Section C- General Record Keeping requirements contains the Permittee's obligation with regard to response steps.

D.1.10 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.1(d) shall be submitted to the address in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

***

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

Part 70 Quarterly Report

Source Name: **General Motors LLC**
Source Address: **105 GM Drive, Bedford, Indiana 47421**
Part 70 Permit No.: **T 093-26058-00007**
Facility: **Thermal Chip dryer (CHIP-2)**
Parameter: **Amount of metal processed**
Limit: **Less than 66576 tons of metal per twelve (12) consecutive month period with compliance determined at the end of each month.**

QUARTER: **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:

Form Completed by: _____
Title / Position: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

Modification No. 7
Three E sections have been added to the permit to incorporate 40 CFR 63, Subpart ZZZZ, 40 CFR 63, Subpart ZZZZZZ, and 40 CFR 60, Subpart UUU.

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

Emissions Unit Description:

(f) **Activities associated with emergencies, including the following:**

(1) Emergency generators as follows:

(a) Diesel generators not exceeding one thousand six hundred (1,600) horsepower.

(2) Stationary fire pump engines.

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

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

E.2.1 National Emissions Standards for Hazardous Air Pollutants Under 40 CFR Part 63 [326 IAC 20-1] [40 CFR Part 63, Subpart A]

The provisions of 40 CFR 63, Subpart A - General Provisions apply to the facility described in this section except when otherwise specified in 40 CFR 63, Subpart ZZZZ.

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

By March 3, 2013, the Permitee shall comply with the following provisions of 40 CFR 63, Subpart ZZZZ as specified is Attachment B of this permit:

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

SECTION E.3 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Semi-Permanent Mold (SPM) Lines (units approved for construction in SSM 093-29425-00007)

Three (3) Semi-Permanent Mold (SPM) Lines consisting of pouring, cooling, and extraction, identified as SPM Line 1, SPM Line 2, and SPM Line 3, approved for construction in 2010, each with a nominal capacity of 60 molds per hour using 1.6 tons of molten aluminum and 2 tons of core sand per hour, with emissions from each controlled by a baghouse.

(The information describing the process contained in this emissions unit description box is

descriptive information and does not constitute enforceable conditions.)

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

E.3.1 National Emissions Standards for Hazardous Air Pollutants Under 40 CFR Part 63 [326 IAC 20-1] [40 CFR Part 63, Subpart A]

The provisions of 40 CFR 63, Subpart A - General Provisions apply to the facility described in this section except when otherwise specified in 40 CFR 63, Subpart ZZZZZZ.

E.3.2 National Emissions Standards for Hazardous Air Pollutants for Area Source Standards for Aluminum, Copper, and other Non-ferrous Foundries [40 CFR Part 63, Subpart ZZZZZZ]]

The Permitee shall comply with the following provisions of 40 CFR 63, Subpart ZZZZZZ as specified is Attachment C of this permit:

(1) 40 CFR 63.11544(a)(1)
(2) 40 CFR 63.11544(a)(4)(i)
(3) 40 CFR 63.11544(b)
(4) 40 CFR 63.11544(c)
(5) 40 CFR 63.11545(a)
(6) 40 CFR 63.11550(b)
(7) 40 CFR 63.11552(a)
(8) 40 CFR 63.11552(d)
(9) 40 CFR 63.11553(a)
(10) 40 CFR 63.11553(b)
(11) 40 CFR 63.11553(c)(1)
(12) 40 CFR 63.11553(c)(2)
(13) 40 CFR 63.11553(c)(3)
(14) 40 CFR 63.11553(d)
(15) 40 CFR 63.11553(e)
(16) 40 CFR 63.11555
(17) 40 CFR 63.11556
(18) 40 CFR 63.11557

SECTION E.4 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(units approved for construction in SSM 093-29425-00007)

(h) One (1) natural gas-fired thermal sand reclamation system, identified as Sand Reclaim, with a maximum capacity of 6.0 tons of sand per house and a maximum heat input of 6.0 MMBtu/hr, with emissions controlled by a baghouse. [An affected facility under NSPS UUU].

(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

E.4.1 General Provisions Relating to New Source Performance Standards [326 IAC 12-1] [40 CFR Part 60, Subpart A]

(a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60 Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1 for the sand reclamation operation, identified as Sand Reclaim except as otherwise specified in 40 CFR Part 60, Subpart UUU.

(b) Pursuant to 40 CFR 60.10, the Permittee shall submit all required notifications and reports to:

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

E.4.2 Standards of Perfomance for Calciners and Dryers in Mineral Processing Industries [40 CFR Part 60, Subpart UUUU]]

The permitee shall comply with the following provisions of 40 CFR 60, Subpart UUU as specified is Attachment D of this permit:

(a) 40 CFR 60.730(a)
(b) 40 CFR 60.730(c)
(c) 40 CFR 60.731
(d) 40 CFR 60.732
(e) 40 CFR 60.735(a)
(f) 40 CFR 60.735(c)(1), (2)
(g) 40 CFR 60.735(d)
(h) 40 CFR 60.736(a), (b)
(i) 40 CFR 60.737

Modification No. 8
Limits have been updated to reflect current model language.

D.2.1 PSD Minor Limit [326 IAC 2-2] and HAPs Area Source Limit

***

(c) The PM10 emissions from each of the furnaces, other than furnace DC No. 9, shall not exceed 1.78 pounds per ton of metal melted averaged over the melt cycle.

(d) The PM~~/PM10~~ emissions from furnace DC No. 9 shall not exceed 1.28 pounds per ton of metal melted averaged over the melt cycle.

(e) The PM10 emissions from furnace DC No. 9 shall not exceed 1.28 pounds per ton of metal melted averaged over the melt cycle.

Compliance with the above limit combined with Conditions D.2.1, D.4.1, D.5.1, D.7.1, and the PTE of other emission unit, shall limit PM from the entire source to less than 250 tons per twelve (12) month consecutive period and render 326 IAC 2-2 not applicable to the entire source. ~~These limits are necessary in order that the source maintain minor PSD status; therefore, the requirements of 326 IAC 2-2 (PSD) will not apply to units constructed after 1977~~ These conditions are also sufficient to limit emissions of HAPs to less than 10 tons per year for any single HAP and less than 25 tons per year for all HAPs combined.

Modification No. 9
The existing limit addressing materials burned in the furnace has been updated to reflect current standard language.

D.2.1 PSD Minor Limit [326 IAC 2-2] and HAPs Area Source Limit

***

(m) The Permittee shall ~~not melt any post-consumer scrap materials in any of the furnaces at this source. Only General Motors returns and/or returns from non-General Motors sources where the composition of the purchased returns have at least the same quality as the General Motors returns shall be melted in any of the furnaces. The non-General Motors~~

~~returns shall be specified contractually, and the quality of the returns shall be controlled contractually. Therefore, this source is not considered a secondary metal production facility and is therefore, not one of the 28 listed source categories.~~ **melt only clean charge, internal scrap, or customer returns any post-consumer scrap materials in any of the furnaces at this source.**

Conclusion and Recommendation

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Source Modification No. 093-29425-00007 and Significant Permit Modification No. 093-29428-00007. The staff recommend to the Commissioner that this Part 70 Significant Source and Significant Permit Modification be approved.

IDEM Contact

(a) Questions regarding this proposed permit can be directed to Jillian Bertram 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)233-1782 or toll free at 1-800-451-6027 extension 3-1782.

(b) A copy of the findings is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/

(c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.idem.in.gov

Company Name: General Motors, LLC

Address City IN Zip: 105 GM Drive, Bedford, IN 47421

Permit No.: T093-29425-00007, T093-29428-00007

Reviewer: Jillian Bertram

* Limit is to avoid 326 IAC 2-2, limits come from a 175,000 ton/yr throughput limit and limits requested by the souce

** Limit is to avoid being a major source of HAPs

*** Emission Factor is limited to avoid 326 IAC 2-2

	Limited Emissions (tons/yr)							
Emission Unit	**PM**	**PM10**	**SO2**	**NOx**	**VOC**	**CO**	**Single HAP**	**Total HAP**
Chip Dryer Process	45.50*	45.50*	0.00	0.00	66.58*	0.00	0.00	0.00
Chip Dryer Combustion	0.06	0.06	0.02	2.99	0.16	2.51	0.05	0.06
All furnaces	155.75*	155.75*	0.67	112.53	6.19	94.52	4.99	7.36**
SPM Line 1	9.39	5.47	1.21	0.00	24.53	3.57	1.04	4.86
SPM Line 2	9.39	5.47	1.21	0.00	24.53	3.57	1.04	4.86
SPM Line 3	9.39	5.47	1.21	0.00	24.53	3.57	1.04	4.86
Core Make 1	0.00	0.00		0.00	2.86	0.00	0.04	0.48
Core Make 2	0.00	0.00		0.00	2.86	0.00	0.04	0.48
Core Make 3	0.00	0.00		0.00	2.86	0.00	0.04	0.48
Core Make 4	0.00	0.00		0.00	2.86	0.00	0.04	0.48
Core Make 5	0.00	0.00	111.45*	0.00	2.86	0.00	0.04	0.48
Sand Mix 1								
Sand Mix 2	5.57***	14.05	0.00	0.00	0.00	0.00	0.00	0.00
Sand Handling								
Sand Reclaim	10.00*	14.39	0.02	2.63	24.90 ***	2.21	0.05	0.05
Solution HT Furnace 1	0.02	0.10	0.01	1.31	0.07	1.10	0.02	0.02
Solution Ht Furnace 2	0.02	0.10	0.01	1.31	0.07	1.10	0.02	0.02
Aging HT Furance 1	0.02	0.07	0.01	0.88	0.05	0.74	0.02	0.02
Aging HT Furance 2	0.08	0.07	0.01	0.88	0.05	0.74	0.02	0.02
Misc. Combustion	0.45	1.78	0.14	23.43	1.29	19.68	0.42	0.44
Coatings	0.00	0.00	0.00	0.00	1.71	0.00	0.00	0.00
Total	**245.65**	**248.27**	**115.94**	**145.96**	**188.93**	**133.32**	**4.99**	**24.99**

Appendix A: Emission Calculations
Unlimited PTE Summary of Modification

Company Name: General Motors, LLC
Address City IN Zip: 105 GM Drive, Bedford, IN 47421
Permit No.: T093-29425-00007, T093-29428-00007
Reviewer: Jillian Bertram
Date: 7/6/2010

Emission Unit	Emissions (tons/yr)							
	PM	PM10	SO2	NOx	VOC	CO	Single HAP	Total HAP
Line 1 Stack Melter	38.98	38.98	0.03	4.86	0.27	4.08	0.09	0.09
Line 2 Stack Melter	38.98	38.98	0.03	4.86	0.27	4.08	0.09	0.09
Line 3 Stack Melter	38.98	38.98	0.03	4.86	0.27	4.08	0.09	0.09
SPM Line 1	9.39	5.47	1.21	0.00	24.53	3.57	1.04	4.86
SPM Line 2	9.39	5.47	1.21	0.00	24.53	3.57	1.04	4.86
SPM Line 3	9.39	5.47	1.21	0.00	24.53	3.57	1.04	4.86
Core Make 1	0.00	0.00	84.10	0.00	2.86	0.00	0.04	0.48
Core Make 2	0.00	0.00	84.10	0.00	2.86	0.00	0.04	0.48
Core Make 3	0.00	0.00	84.10	0.00	2.86	0.00	0.04	0.48
Core Make 4	0.00	0.00	84.10	0.00	2.86	0.00	0.04	0.48
Core Make 5	0.00	0.00	84.10	0.00	2.86	0.00	0.04	0.48
Sand Mix 1	93.66	14.05	0.00	0.00	0.00	0.00	0.00	0.00
Sand Mix 2								
Sand Handling								
Sand Reclaim	94.66	14.39	0.02	2.63	8.03	2.21	0.05	0.05
Solution HT Furnace 1	0.02	0.10	0.01	1.31	0.07	1.10	0.02	0.02
Solution HT Furnace 2	0.02	0.10	0.01	1.31	0.07	1.10	0.02	0.02
Aging HT Furance 1	0.02	0.07	0.01	0.88	0.05	0.74	0.02	0.02
Aging HT Furance 2	0.08	0.07	0.01	0.88	0.05	0.74	0.02	0.02
Misc. Combustion	0.45	1.78	0.14	23.43	1.29	19.68	0.42	0.44
Coatings	0.00	0.00	0.00	0.00	1.71	0.00	0.00	0.00
Total	**334.03**	**163.90**	**424.37**	**45.03**	**99.93**	**48.54**	**4.16**	**17.85**

Appendix A: Emission Calculations
Stack Melters

Company Name: **General Motors, LLC**

Address City IN Zip: **105 GM Drive, Bedford, IN 47421**
Permit No.: **T093-29425-00007, T093-29428-00007**
Reviewer: **Jillian Bertram**
Date: **7/6/2010**

Emission Factors

PM	1.7800	lb/ton *
PM10	1.7800	lb/ton*
PM2.5	1.7800	lb/ton*
SOx	0.6000	lb/MMCF**
NOx	100.0000	lb/MMCF**
VOC	5.5000	lb/MMCF**
CO	84.0000	lb/MMCF**
Pb	0.0005	lb/MMCF**

* Emission factors are "alternate" emission factors determined for aluminum melting in previous approvals.
** 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

Methodology

Emissions (tons/yr) = EF (lb/ton) * Capacity (tons Al/hr) * 8760 (hr/yr) * 1/2000 (tons/lb)
Emissions (tons/yr) = EF (lb/MMCF) * Capacity (MMCF/yr) * 1/2000 (tons/lb)
Capacity (MMCF/yr) = Capacity (MMBtu/hr) * 8.76

Emission Unit	Capacity			Emissions (tons/yr)							
	(tons Al/hr)	(MMBtu/hr)	(MMCF/yr)	PM	PM10	PM2.5	SOx	NOx	VOC	CO	Pb
Line 1 Stack Melter	5.00	11.10	97.24	38.98	38.98	38.98	0.03	4.86	0.27	4.08	0.00
Line 2 Stack Melter	5.00	11.10	97.24	38.98	38.98	38.98	0.03	4.86	0.27	4.08	0.00
Line 3 Stack Melter	5.00	11.10	97.24	38.98	38.98	38.98	0.03	4.86	0.27	4.08	0.00
			Total	**116.95**	**116.95**	**116.95**	**0.09**	**14.59**	**0.80**	**12.25**	**0.00**

Appendix A: Emission Calculations
Stack Melters HAPs

Company Name:	**General Motors, LLC**
Address City IN Zip:	**105 GM Drive, Bedford, IN 47421**
Permit No.:	**T093-29425-00007, T093-29428-00007**
Reviewer:	**Jillian Bertram**
Date:	**7/6/2010**

Pollutant	Organic EF	Inorganic EF	Units
HCl	0.490	0.004	lb/lb flux
HF	0.007	0.004	lb/lb flux

Methodology

Emissions (tons/yr) = (Organic EF (lb/lb flux) * Organic Capacity (lb flux/yr) * 1/2000 (tons/lb))+(Inorganic EF (lb/lb flux) * Inorganic Capacity (lb flux/yr) * 1/2000 (tons/lb))

Emission factors are "alternate" factors determined for aluminum melting in previous approvals.

	Capacity (lb flux/yr)		Emissions (tons/yr)	
Emission Unit	**Organic**	**Inorganic**	**HCl**	**HF**
Line 1 Stack Melter	1428.23	2740.13	0.36	0.01
Line 2 Stack Melter	1428.23	2740.13	0.36	0.01
Line 3 Stack Melter	1428.23	2740.13	0.36	0.01
		Total	**1.07**	**0.03**

Appendix A: Emission Calculations
Stack Melters HAPs

Company Name: General Motors, LLC
Address City IN Zip: 105 GM Drive, Bedford, IN 47421
Permit No.: T093-29425-00007, T093-29428-00007
Reviewer: Jillian Bertram
Date: 7/6/2010

HAP	Emission Factor (lbs/MMCF)
2-Methylnapthalene	0.00002
7,12Dimethylbenz(a)anthracene	0.00002
Benzene	0.00210
Dichlorobenzene	0.00120
Formaldehyde	0.07500
Hexane	1.80000
Napthalene	0.00061
Phenanathrene	0.00002
Toluene	0.00340
Arsenic	0.00020
Barium	0.00440
Beryllium	0.00001
Cadmium	0.00110
Chromium	0.00140
Cobalt	0.00008
Manganese	0.00038
Mercury	0.00026
Nickel	0.00210
Selenium	0.000024

	Emissions (tons/yr)			
	Line 1 Stack Melter	Line 2 Stack Melter	Line 3 Stack Melter	Total
Capacity (MMCF/yr)	97.24	97.24	97.24	291.72
2-Methylnapthalene	0.0000	0.0000	0.0000	0.0000
7,12Dimethylbenz(a)anthracene	0.0000	0.0000	0.0000	0.0000
Benzene	0.0001	0.0001	0.0001	0.0003
Dichlorobenzene	0.0001	0.0001	0.0001	0.0002
Formaldehyde	0.0036	0.0036	0.0036	0.0109
Hexane	0.0875	0.0875	0.0875	0.2625
Napthalene	0.0000	0.0000	0.0000	0.0001
Phenanathrene	0.0000	0.0000	0.0000	0.0000
Toluene	0.0002	0.0002	0.0002	0.0005
Arsenic	0.0000	0.0000	0.0000	0.0000
Barium	0.0002	0.0002	0.0002	0.0006
Beryllium	0.0000	0.0000	0.0000	0.0000
Cadmium	0.0001	0.0001	0.0001	0.0002
Chromium	0.0001	0.0001	0.0001	0.0002
Cobalt	0.0000	0.0000	0.0000	0.0000
Manganese	0.0000	0.0000	0.0000	0.0001
Mercury	0.0000	0.0000	0.0000	0.0000
Nickel	0.0001	0.0001	0.0001	0.0003
Selenium	0.0000	0.0000	0.0000	0.0000
			Total	**0.2760**

* Emission factors are from Section 1.4, AP-42, 5th edition, July 1998.

Methodology

Emissions (tons/yr) = EF (lbs/MMCF) * Capacity (MMCF/yr)* 1/2000 (lbs/ton)

Appendix A: Emission Calculations
Pouring, Cooling, and Extraction

Company Name: **General Motors, LLC**

Address City IN Zip: **105 GM Drive, Bedford, IN 47421**
Permit No.: **T093-29425-00007, T093-29428-00007**
Reviewer: **Jillian Bertram**
Date: **7/6/2010**

Emission Factors

PM	1.3400	lbs/ton **
PM10	0.7800	lbs/ton **
PM2.5	0.4200	lbs/ton **
SOx	0.1720	lbs/ton *
NOx	0.0000	lbs/ton *
VOC	3.5000	lbs/ton *
CO	0.5100	lbs/ton *

* Emission factors are from a stack test at Technikon in Sacramento, CA, February 2008, Epoxy Acrylic Pouring, Cooling, and Shakeout

** Emission Factors are recalculated from AP-42, 1995, Tables 12.10-7 and 12.10-9

Methodology

Emissions (tons/yr) = EF (lbs/ton) * Capacity (tons/hr) * 8760 (hr/yr) * 1/2000 (tons/lb)

Emission Unit	Capacity	Emissions (tons/yr)						
	(tons/hr)	PM	PM10	PM2.5	SOx	NOx	VOC	CO
SPM Line 1	1.60	9.39	5.47	2.94	1.21	0.00	24.53	3.57
SPM Line 2	1.60	9.39	5.47	2.94	1.21	0.00	24.53	3.57
SPM Line 3	1.60	9.39	5.47	2.94	1.21	0.00	24.53	3.57
	Total	**28.17**	**16.40**	**8.83**	**3.62**	**0.00**	**73.58**	**10.72**

Appendix A: Emission Calculations
Pouring, Cooling, and Extraction HAPs

Company Name: General Motors, LLC
Address City IN Zip: 105 GM Drive, Bedford, IN 47421
Permit No.: T093-29425-00007, T093-29428-00007
Reviewer: Jillian Bertram
Date: 7/6/2010

HAP	Emission Factor (lbs/ton)
Cresol	0.14900
Isopropylbenzene	0.11800
Ethylene Glycol	0.10200
Acetaldehyde	0.07020
Acetophenone	0.03250
Ethylbenzene	0.03010
Propionaldehyde	0.02940
Toluene	0.02440
Biphenyl	0.02200
Phenol	0.01830
Methylnapthalene, 2-	0.01710
Cresol, o-	0.01430
Styrene	0.01080
Methylnapthalene, 1-	0.00842
Xylene, mp-	0.00787
Benzene	0.00738
Other HAPs	0.03223
Total HAPs	0.69400

	Emissions (tons/yr)			
	SPM Line 1	SPM Line 2	SPM Line 3	Total
Capacity (tons/yr)	14016.00	14016.00	14016.00	42048.00
Cresol	1.04	1.04	1.04	**3.13**
Isopropylbenzene	0.83	0.83	0.83	2.48
Ethylene Glycol	0.71	0.71	0.71	2.14
Acetaldehyde	0.49	0.49	0.49	1.48
Acetophenone	0.23	0.23	0.23	0.68
Ethylbenzene	0.21	0.21	0.21	0.63
Propionaldehyde	0.21	0.21	0.21	0.62
Toluene	0.17	0.17	0.17	0.51
Biphenyl	0.15	0.15	0.15	0.46
Phenol	0.13	0.13	0.13	0.38
Methylnapthalene, 2-	0.12	0.12	0.12	0.36
Cresol, o-	0.10	0.10	0.10	0.30
Styrene	0.08	0.08	0.08	0.23
Methylnapthalene, 1-	0.06	0.06	0.06	0.18
Xylene, mp-	0.06	0.06	0.06	0.17
Benzene	0.05	0.05	0.05	0.16
Other HAPs	0.23	0.23	0.23	0.68
Total HAPs	4.86	4.86	4.86	**14.59**

* Emission factors arefrom a stack test at Technikon in Sacramento, CA, February 2008, Epoxy Acrylic Pouring, Cooling, and Shakeout

Methodology

Emissions (tons/yr) = EF (lbs/ton) * Capacity (tons/yr)* 1/2000 (lbs/ton)

Core Machines

Company Name: **General Motors, LLC**

Address City IN Zip: **105 GM Drive, Bedford, IN 47421**
Permit No.: **T093-29425-00007, T093-29428-00007**
Reviewer: **Jillian Bertram**
Date: **7/6/2010**

Emission Factors

PM	0.0000	lbs/ton sand***
PM10	0.0000	lbs/ton sand***
PM2.5	0.0000	lbs/ton sand***
SOx	16.0000	lbs/ton sand**
NOx	0.0000	lbs/ton sand
VOC	0.5433	lbs/ton sand*
CO	0.0000	lbs/ton sand

Emission Unit	Capacity (tons sand/hr)*	Emissions (tons/yr)					
		PM	PM10	SOx	NOx	VOC	CO
Core Make 1	1.20	0.00	0.00	84.10	0.00	2.86	0.00
Core Make 2	1.20	0.00	0.00	84.10	0.00	2.86	0.00
Core Make 3	1.20	0.00	0.00	84.10	0.00	2.86	0.00
Core Make 4	1.20	0.00	0.00	84.10	0.00	2.86	0.00
Core Make 5	1.20	0.00	0.00	84.10	0.00	2.86	0.00
	Total	**0.00**	**0.00**	**424.36**	**0.00**	**14.28**	**0.00**

* Throughput to the Core Make Machines is limited by throughput to the SPM lines

Appendix A: Emission Calculations

Core Machines HAPs

Company Name: **General Motors, LLC**

Address City IN Zip: **105 GM Drive, Bedford, IN 47421**
Permit No.: **T093-29425-00007, T093-29428-00007**
Reviewer: **Jillian Bertram**
Date: **7/6/2010**

HAP	Emission Factor	
Acetophenone	0.0081	lbs/ton sand
Cumene	0.0835	lbs/ton sand

* Emission factors are from a stack test at Technikon in Sacramento, CA, October 2005, Epoxy Acrylic Core Making

Unit	Capacity (tons/yr)	Emisisons (tons/yr)		
		Acetophenone	Cumene	Total HAPs
Core Make 1	10512.00	0.04	0.44	0.48
Core Make 2	10512.00	0.04	0.44	0.48
Core Make 3	10512.00	0.04	0.44	0.48
Core Make 4	10512.00	0.04	0.44	0.48
Core Make 5	10512.00	0.04	0.44	0.48
	Total	**0.212868**	**2.19**	**2.41**

Methodology

Emissions (tons/yr) = Emission Factor (lbs/ton sand) * Capacity (tons/yr) * 1/2000 (ton/lb)

Appendix A: Emission Calculations
Sand Mixers and Handling

Company Name: General Motors, LLC
Address City IN Zip: 105 GM Drive, Bedford, IN 47421
Permit No.: T093-29425-00007, T093-29428-00007
Reviewer: Jillian Bertram
Date: 7/6/2010

Pollutant	Emission Factor	
PM	3.6	lb/ton sand *
PM10	0.54	lb/ton sand *
PM2.5	0.54	lb/ton sand**

* Emission Factors are from FIRE Version 6.25 SCC 3-04-003-50
** PM2.5 is considered equal to PM10
*** Maximum input to sand mixers is limited by the capacity of SPM lines

Emission Unit	Capacity (tons/hr) ***	Emissions (tons/yr)		
		PM (tons/yr)	PM10 (tons/yr)	PM2.5 (tons/yr)
Sand Mix 1	5.94	93.66	14.05	14.05
Sand Mix 2				
Sand Handling				

Methodology
Emissions (tons/yr) = EF (lb/ton sand) * Capacity (tons/hr) *8760 (hr/yr) * 1/2000 (tons/lb)

Appendix A: Emission Calculations
Thermal Sand Reclaimation

Company Name: **General Motors, LLC**

Address
City IN Zip: **105 GM Drive, Bedford, IN 47421**
Permit No.: **T093-29425-00007, T093-29428-00007**
Reviewer: **Jillian Bertram**
Date: **7/6/2010**

Emission Factors

PM	3.6019	lb/ton *
PM10	0.5475	lb/ton*
PM2.5	0.5475	lb/ton*
SOx	0.6000	lb/MMCF**
NOx	100.0000	lb/MMCF**
VOC	5.5000	lb/MMCF**
VOC	20.0000	lb/ton***
CO	84.0000	lb/MMCF**

* Emission factors are for SCC 3-04-003-50 plus the emissions from natural gas combustion. PM 2.5 is assumed equal to PM10.
** 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

*** VOCs are from the organic binders in the sand which are assumed to be 1% by weight of the 6 tons/hr sand weight at 98.5% destruction efficiency. VOCs from natural gas combustion are added to the VOC emissions from the organic binders in the sand for the total potential to emit from Sand Reclaim.

Methodology

Emissions (tons/yr) = EF (lb/ton) * Capacity (tons Al/hr) * 8760 (hr/yr) * 1/2000 (tons/lb)
Emissions (tons/yr) = EF (lb/MMCF) * Capacity (MMCF/yr) * 1/2000 (tons/lb)
Capacity (MMCF/yr) = Capacity (MMBtu/hr) * 8.76

Emission Unit	Capacity			Emissions (tons/yr)							
	(tons/hr)	(MMBtu/hr)	(MMCF/yr)	PM	PM10	PM2.5	SOx	NOx	VOC	CO	Pb
Sand Reclaim	6.00	6.00	52.56	94.66	14.39	14.39	0.02	2.63	8.03	2.21	0.00

Appendix A: Emission Calculations
Thermal Sand Reclaimation HAPs

Company Name: General Motors, LLC
Address City IN Zip: 105 GM Drive, Bedford, IN 47421
Permit No.: T093-29425-00007, T093-29428-00007
Reviewer: Jillian Bertram
Date: 7/6/2010

Pollutant	Emission Factor (lbs/MMCF)
Pb	0.00050
Benzene	0.00210
Dichlorobenzene	0.00120
Formaldehyde	0.07500
Hexane	1.80000
Napthalene	0.00061
Toluene	0.00340
Arsenic	0.00020
Barium	0.00440
Cadmium	0.00110
Chromium	0.00140
Manganese	0.00038
Mercury	0.00026
Nickel	0.00210

	Emissions (tons/yr)
	Sand Reclaim 1
Capacity (MMBtu/hr)	6.00
Capacity (MMCF/yr)	52.56
Pb	0.0000
Benzene	0.0001
Dichlorobenzene	0.0000
Formaldehyde	0.0020
Hexane	**0.0473**
Napthalene	0.0000
Toluene	0.0001
Arsenic	0.0000
Barium	0.0001
Cadmium	0.0000
Chromium	0.0000
Manganese	0.0000
Mercury	0.0000
Nickel	0.0001
Total HAPs	**0.0497**

* Emission factors are from Section 1.4, AP-42, 5th edition, July 1998 except as noted.

Methodology

Emissions (tons/yr) = EF (lbs/MMCF) * Capacity (MMCF/yr)* 1/2000 (lbs/ton)

Appendix A: Emission Calculations
Heat Treat

Company Name: General Motors, LLC
Address City IN Zip: 105 GM Drive, Bedford, IN 47421
Permit No.: T093-29425-00007, T093-29428-00007
Reviewer: Jillian Bertram
Date: 7/6/2010

Pollutant	Emission Factor (lbs/MMCF)
PM	1.90000
PM10	7.60000
PM2.5	7.60000
SO2	0.60000
NOx	100.00000
VOC	5.50000
CO	84.00000
Pb	0.00050
Benzene	0.00210
Dichlorobenzene	0.00120
Formaldehyde	0.07500
Hexane	1.80000
Napthalene	0.00061
Toluene	0.00340
Arsenic	0.00020
Barium	0.00440
Cadmium	0.00110
Chromium	0.00140
Manganese	0.00038
Mercury	0.00026
Nickel	0.00210

	Emissions (tons/yr)				
	Solution HT Furance 1	**Solution HT Furnace 2**	**Aging HT Furance 1**	**Agind HT Furance 2**	**Total**
Capacity (MMBtu/hr)	3.00	3.00	2.00	2.00	10.00
Capacity (MMCF/yr)	26.28	26.28	17.52	17.52	87.60
PM	0.0250	0.0250	0.0166	0.0166	0.0832
PM10	0.0999	0.0999	0.0666	0.0666	0.3329
PM2.5	0.0999	0.0999	0.0666	0.0666	0.3329
SO2	0.0079	0.0079	0.0053	0.0053	0.0263
NOx	1.3140	1.3140	0.8760	0.8760	4.3800
VOC	0.0723	0.0723	0.0482	0.0482	0.2409
CO	1.1038	1.1038	0.7358	0.7358	3.6792
Pb	0.0000	0.0000	0.0000	0.0000	0.0000
Benzene	0.0000	0.0000	0.0000	0.0000	0.0001
Dichlorobenzene	0.0000	0.0000	0.0000	0.0000	0.0001
Formaldehyde	0.0010	0.0010	0.0007	0.0007	0.0033
Hexane	**0.0237**	**0.0237**	**0.0158**	**0.0158**	**0.0788**
Napthalene	0.0000	0.0000	0.0000	0.0000	0.0000
Toluene	0.0000	0.0000	0.0000	0.0000	0.0001
Arsenic	0.0000	0.0000	0.0000	0.0000	0.0000
Barium	0.0001	0.0001	0.0000	0.0000	0.0002
Cadmium	0.0000	0.0000	0.0000	0.0000	0.0000
Chromium	0.0000	0.0000	0.0000	0.0000	0.0001
Manganese	0.0000	0.0000	0.0000	0.0000	0.0000
Mercury	0.0000	0.0000	0.0000	0.0000	0.0000
Nickel	0.0000	0.0000	0.0000	0.0000	0.0001
Total HAPs	**0.0249**	**0.0249**	**0.0166**	**0.0166**	**0.0829**

* Emission factors are from Section 1.4, AP-42, 5th edition, July 1998 except as noted.

Methodology

Emissions (tons/yr) = EF (lbs/MMCF) * Capacity (MMCF/yr)* 1/2000 (lbs/ton)

Appendix A: Emissions Calculations
Miscellaneous Natural Gas Combustion

Company Name: General Motors, LLC
Address City IN Zip: 105 GM Drive, Bedford, IN 47421
Permit Number: T093-29425-00007, T093-29428-00007
Reviewer: Jillian Bertram
Date: 7/6/2010

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
53.5	468.7

	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	0.4	1.8	0.1	23.4	1.3	19.7

*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 next page for HAPs emissions calculations.

Appendix A: Emissions Calculations
Miscellaneous Natural Gas Combustion

HAPs Emissions

Company Name: General Motors, LLC
Address City IN Zip: 105 GM Drive, Bedford, IN 47421
Permit Number: T093-29425-00007, T093-29428-00007
Reviewer: Jillian Bertram
Date: 7/6/2010

	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
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	4.921E-04	2.812E-04	1.757E-02	4.218E-01	7.967E-04

	HAPs - Metals				
	Lead	Cadmium	Chromium	Manganese	Nickel
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	1.172E-04	2.578E-04	3.281E-04	8.905E-05	4.921E-04

Methodology is the same as previous page.

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

Appendix A: Emission Calculations
Coatings, Dips, and Solvents

Company Name:	**General Motors, LLC**
Address City IN Zip:	**105 GM Drive, Bedford, IN 47421**
Permit No.:	**T093-29425-00007, T093-29428-00007**
Reviewer:	**Jillian Bertram**
Date:	**7/6/2010**

Coating	VOC Content (lb/gal)	Usage (gal/yr)	VOC (tons/yr)
Metal Cleaner	7.82	438.00	1.71
Release Agent	0.00	1752.00	0.00
		Total	**1.71**

Methodology
VOC (tons/yr) = VOC Content (lb/gal) * Usage (gal/yr) * 1/2000 (ton/lb)
VOC Content is from MSDS forms.
Both Coatings are HAP-free.

Appendix A: Emission Calculations
Controlled Emissions

Company Name: General Motors, LLC
Address City IN Zip: 105 GM Drive, Bedford, IN 47421
Permit No.: T093-29425-00007, T093-29428-00007
Reviewer: Jillian Bertram
Date: 7/6/2010

Emission Unit	Control Device	Pollutant	Uncontrolled PTE (tons/yr)	Capture Efficiency	Control Efficiency	Controlled PTE (tons/yr)	Req.?
SPM Line 1	Baghouse	PM	9.39	99%	99%	0.19	N
SPM Line 1	Baghouse	PM10	5.47	99%	99%	0.11	N
SPM Line 1	Baghouse	PM2.5	2.94	99%	99%	0.06	N
SPM Line 2	Baghouse	PM	9.39	99%	99%	0.19	N
SPM Line 2	Baghouse	PM10	5.47	99%	99%	0.11	N
SPM Line 2	Baghouse	PM2.5	2.94	99%	99%	0.06	N
SPM Line 3	Baghouse	PM	9.39	99%	99%	0.19	N
SPM Line 3	Baghouse	PM10	5.47	99%	99%	0.11	N
SPM Line 3	Baghouse	PM2.5	2.94	99%	99%	0.06	N
Core Make 1	Scrubber	SO2	84.10	98%	99%	2.51	Y
Core Make 2	Scrubber	SO2	84.10	98%	99%	2.51	Y
Core Make 3	Scrubber	SO2	84.10	98%	99%	2.51	Y
Core Make 4	Scrubber	SO2	84.10	98%	99%	2.51	Y
Core Make 5	Scrubber	SO2	84.10	98%	99%	2.51	Y
Sand Mixers and Handling	Baghouse	PM	93.66	99%	99%	1.86	Y
Sand Mixers and Handling	Baghouse	PM10	14.05	99%	99%	0.28	Y
Sand Mixers and Handling	Baghouse	PM2.5	14.05	99%	99%	0.28	Y
Sand Reclaim	Baghouse	PM	94.66	100%	99%	0.95	Y
Sand Reclaim	Baghouse	PM10	14.39	100%	99%	0.14	Y
Sand Reclaim	Baghouse	PM2.5	14.39	100%	99%	0.14	Y
Sand Reclaim	Baghouse	Total HAPs*	0.05	100%	99%	0.05	Y

Methodology
Controlled PTE (tons/yr) = (Uncontrolled PTE (tons/yr) * (1-Capture))+ (Uncontrolled PTE (tons/yr)*Capture * (1-Control)
* Baghouse only controls metal portion of HAPs

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: Jeffery Hummel
General Motors
105 GM Dr
Bedford, IN 47421

DATE: February 8, 2011

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

SUBJECT: Final Decision
Title V - Significant Permit Modification
093 - 29428 - 00007

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:
Eric A Gonzales, Plant Mgr
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.

Final Applicant Cover letter.dot 11/30/07

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

February 8, 2011

TO: Bedford Public Library

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

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

Applicant Name: General Motors
Permit Number: 093 - 29428 - 00007

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

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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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: February 8, 2011

RE: General Motors / 093 - 29428 - 00007

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

Mail Code 61-53

IDEM Staff	LPOGOST 2/8/2011 General Motors LLC 093 - 29428 - 00007 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		Jeffery Hummel General Motors LLC 105 GM Dr Bedford IN 47421 (Source CAATS) Via confirmed delivery									
2		Eric A Gonzales Plant Mgr General Motors LLC 105 GM Dr Bedford IN 47421 *(RO CAATS)*									
3		Bedford City Council and Mayors Office 1102 16th St Bedford IN 47421 *(Local Official)*									
4		Lawrence County Board of Commissioners 916 15th Street Bedford IN 47421 *(Local Official)*									
5		Bedford Public Library 1323 K Street Bedford IN 47421 *(Library)*									
6		Mr. Anthony Wray 1861 Buddha Bypass Rd Bedford IN 47421 *(Affected Party)*									
7		Mr. Bobby Minton 7745 S. Fairfax Rd Bloomington IN 47401 *(Affected Party)*									
8		Mr. Wendell Hibdon Plumbers & Steam Fitters Union, Local 136 2300 St. Joe Industrial Park Dr Evansville IN 47720 *(Affected Party)*									
9		Mr. Danny Arnold 407 Northwood Dr Bedford IN 47421 *(Affected Party)*									
10		Mr. David Weatherholt Boilermaker Local #374 4777 East County Road 2100 North Dale IN 47523 *(Affected Party)*									
11		Mr. Don Sherry 1111 215 St. Tell City IN 47506-2815 *(Affected Party)*									
12		Mr. David Reed RR 1 Box 157 Jasonville IN 47438 *(Affected Party)*									
13		Lawrence County Health Department 2419 Mitchell Rd. Bedford, IN 47421 (Health Department)									
14											
15											

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